Middlebury College Registration Catalogue

Winter and Spring Terms 1972

MIDDLEBURY COLLEGE BULLETIN • MIDDLEBURY, VERMONT

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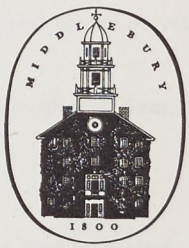

MIDDLEBURY COLLEGE BULLETIN

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REGISTRATION INFORMATION

WINTER AND SPRING TERMS 1971-72

Simultaneous registration will be held for Winter and Spring Terms 1971-72. Students may pick up Registration Materials from November 30 to December 6, 1971 in the Registrar's Office and should consult Faculty Advisers during that period.

REGISTRATION DATE: Tuesday, December 7, 1971, 8:00 a.m. to 5:00 p.m. in McCullough Gym

Class of 1972 -- 8:00 a.m. to 10:00 a.m.
Class of 1973 -- 10:00 a.m. to 12:00 noon
Class of 1974 -- 12:00 noon to 2:00 p.m.
Class of 1975 -- 2:00 p.m. to 5:00 p.m.

Graduate and Special Students may register anytime during the day.

WINTER TERM REGISTRATION 1971-72

REGISTRATION MATERIALS: Winter Term Registration Card 71-72

INSTRUCTIONS:

1. In consultation with your Adviser, list five (5) courses in order of preference, and have your card signed by your Adviser. Be sure to list the correct course numbers.

2. If you are taking a 500 or 600 series course:
   a. Your project must be approved by the Curriculum Committee prior to the registration period.
   b. You must obtain the signatures of both your Adviser and the Dean of Students on your registration card before you register in McCullough Gym.
   c. You should complete only the first choice on your registration card.

3. If you are taking a 700 series course you should complete only the first choice on your registration card, and obtain the signature of your Adviser.

4. You must hand in a Winter Term Registration Card upon entering McCullough Gym, whether or not you are taking a Winter Term program.

INDEPENDENT WORK:

1. Independent Winter Projects: Students who register for Independent Winter Projects (i.e., projects similar to a 500 project during the Fall or Spring) are to designate their studies by the course number 500, preceded by the name of the department in which they are pursuing it, and succeeded by the title "Independent Winter Project". (For example: English 500, Independent Winter Project.)

2. Winter Internships: Students who register for Winter Internships are to designate their choice by the number 600, preceded by the name of the office or department of their sponsor, and succeeded by the title "Internship". (For example: French 600, Internship; Medical Services 600, Internship.)

3. Senior Independent Study: Students beginning or continuing Senior Independent Study (usually a Senior thesis or independent reading in preparation for comprehensive examinations) are to designate their study by the course number 700, preceded by the name of the department in which they are pursuing it, and succeeded by the title "Senior Independent Study". (For example: Psychology 700, Senior Independent Study.)

4. Honors: Seniors beginning or continuing Honors work are to designate their studies by the course number 500, preceded by the name of the department in which they are pursuing it, and succeeded by the title "Honors". (For example: Physics 500, Honors.)

PRIORITIES FOR REGISTRATION:

Since most Winter courses are conducted wholly or partly as seminars, there may not be space in every course for every student who wishes to take it. For this reason, the Winter Term Registration Card has place for five courses.

Hopefully, this year few students will have to take third, fourth or fifth choices. But since there will not be time for supplementary registration, all students--except those registering for Independent Winter Projects, Internships, Senior Independent Study, or Honors work--must offer five choices.

Students who have received permission to pursue Independent Winter Projects or Internships may register for courses instead once they have seen the Catalogue. They will then be admitted to courses according to the system of priorities used for all students wishing to take courses.

The College Curriculum Committee composed of Faculty members, students and administrators, has developed the following system of priorities for Winter Registration in order to maximize the number of students who receive their first choice. Students will first be assigned to courses by class and on the basis of their first-choice. (In other words, Senior first-choices first; Junior first-choices second, etc.) Thereafter, students will be assigned on the basis of their second, third, fourth and fifth choices. (In other words, Senior second-choices, third-choices, fourth-choices, fifth-choices; then Junior second-choices, third-choices, fourth-choices, fifth-choices, etc.)

As soon as possible the Registrar will inform each student of the course to which he has been admitted by posting class rosters in Proctor Hall, the Library and the Registrar's office.

COURSE CHANGES:

Course changes may be made -- where space in the desired course is available -- through Wednesday, January 5, the first day of Winter classes.

SPRING TERM REGISTRATION 1971-72

REGISTRATION MATERIALS:

Spring Term Registration Card 71-72
Course Schedule Card (STUDENT)
Student Activity Card
Class Schedule (COURSES)

INSTRUCTIONS:

1. Spring Term Registration Card 71-72 (see sample below)
   a. Prior to registration, and in consultation with your Adviser, list four (4) courses, plus non-credit Military Science if elected. Have courses requiring "permission" signed by the instructor.
   b. Obtain your Adviser's signature.
   c. If you are taking a 500 series course, you must obtain the signatures of both the instructor and the Chairman of the Department.
   d. If you are registering for fewer or more than four courses, you must obtain the signature of a Dean.
   e. Major: Freshmen do not select a major during Spring Registration. All other students must declare a major. This major must be selected from the list of official majors given in Part 2 on the following page. If your major is listed, write the official name of this major in the box provided (upper right hand corner), and check the single major box below. If you are enrolled in a Joint Major or a Double Major follow the instructions outlined in the section below the list in Part 2.

SPRING TERM REGISTRATION CARD 71-72

STUDENT NAME M 72 13002

SPRING

Dept.	Course No.	Instructor's Signature if a Permission Course
AR	500	A.R. Turner
EI	202	
AR	305	
PS	202	R.J. Feng

If you have registered for fewer, or more, than four credit-courses you must obtain the signature of a Dean.

INDICATE MAJOR

Art

Check the box which applies to your major

☑ Single Major
☐ Double Major
☐ Joint Major

D.A. Brumbeck
Adviser Approval

Dean's Approval

2. Official Majors:

American Literature
American Studies (History)
American Studies (Literature)
Art
Biology
Biology-Chemistry
Chemistry
Classics
Drama (English)
Economics
English
Environmental Studies (Biology)

Environmental Studies (Chemistry)
Environmental Studies (Geography)
Environmental Studies (Geology)
Environmental Studies (Physics)
French
Geography
Geology
German
History
Mathematics
Music
Philosophy
Physics
Political Science
Psychology
Religion
Russian
Sociology-Anthropology
Spanish

Joint Major: A program that combines portions of two of the above disciplines, arranged on an individual basis with the cooperation and approval of the departments involved. The specific requirements for the total Joint Major program must be filed with the Registrar in writing with signatures of both faculty members and the student. These majors should be recorded on the registration card by listing both departments involved (e.g. History-English), and checking the Joint Major Box. The card must be signed by two advisers, one from each department.

Double Major: A program in which the student fulfills the complete major requirements of two departments. These majors should be recorded on the registration card by listing both departments involved (e.g. Art-Music), and checking the Double Major Box. The card must be signed by two advisers, one from each department.

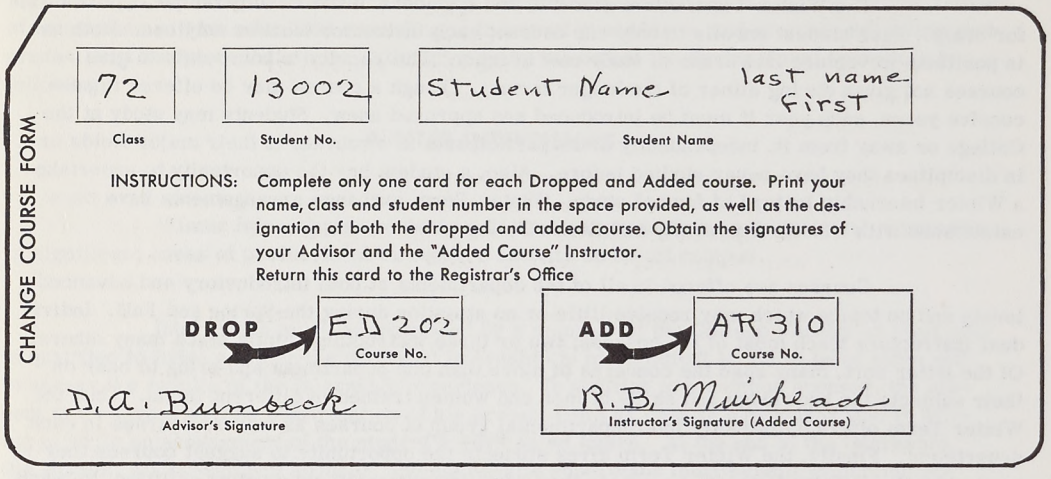
3. Student Activity Card:
   a. Complete this card, bringing it up to date with your previous and present activities.

4. Registration Procedure:
   a. Report to McCullough Gym with your registration materials on Tuesday, December 7th, at the designated hour for your class.
   b. Hand in your Winter Term Registration Card on entering McCullough Gym.
   c. Stop at each table corresponding to the departments in which you wish to enroll. The departmental representatives will give you course cards and indicate the course numbers on your Course Schedule Card. Go to single section courses first.
   d. When you have obtained a course card for each course in which you have been authorized to enroll, hand in your materials at the Check-Out table. Your registration is completed.
   e. At the end of Winter Term your course schedule will be in your Proctor Hall Post Office Box.

5. Drop and Add Card Instructions: (see sample below)
   a. After you have officially registered, all changes in courses or sections must be recorded in the Registrar's office on Change Course Forms.
   b. Use only ONE card to make a course drop and an add.
   c. Fill in the required information in the areas provided: Class, Student Number, and Student Name (listing Last Name first).
   d. Obtain the signatures of both your adviser and the instructor of the course you are adding.

e. Return the completed card to the Registrar's Office on or before the end of the two week period that follows the first day of classes.

f. After the two week period is over, ALL drop and add cards must be approved, in writing, by a Dean plus the other necessary signatures. No verbal permission of course changes will be accepted.


CHANGE COURSE FORM
72
Class
13002
Student No.
Student Name last name first
Student Name
INSTRUCTIONS: Complete only one card for each Dropped and Added course. Print your name, class and student number in the space provided, as well as the designation of both the dropped and added course. Obtain the signatures of your Advisor and the "Added Course" Instructor.
Return this card to the Registrar's Office
DROP
ED 202
Course No.
D. A. Bumbeck
Advisor's Signature
ADD
AR 310
Course No.
R. B. Muirhead
Instructor's Signature (Added Course)

PHYSICAL EDUCATION REGISTRATION 1971-72

Registration for Winter Term Physical Education courses will be held at the Office in McCullough Gymnasium from 9:00-12:00 and 1:00-4:00 on November 29, 30 and December 1. Class assignment lists will be posted in McCullough by December 6 and any conflicts resulting from the students' academic registration on December 7 must be settled prior to December 15 at the Office in McCullough. Winter Term Physical Education begins on January 5. (See Spring Term section of catalogue for Physical Education registrations for Winter II and Spring Seasons.)

WINTER TERM 1972 CATALOGUE

INTRODUCTION

The Winter Term offers students and members of the Faculty unique opportunities for study. Each student enrolls in only one course; each instructor teaches only one. Both are in positions to venture into areas of study new to them. The Faculty is bound only to give courses not given during either of the longer terms. Though a course may be offered in successive years, each year it must be introduced and approved anew. Students may study at the College or away from it, independently or as participants in a course, in their major fields or in disciplines they have never studied before. Also, a student has the opportunity to undertake a Winter Internship instead of formal study. Winter Term exchange arrangements have been established with Lincoln University and Berea College.

Courses are offered in all of the departments at both introductory and advanced levels and on topics which may receive little or no attention during the Spring and Fall. Individual instructors teach most of the courses; two or three instructors jointly teach many others. Of the latter sort, many span the concerns of more than one department and bring to bear on their subjects the knowledge and skills of men and women trained in different fields. Thus the Winter Term offers a distinctly interdepartmental group of courses as well as courses in each department. Finally, the Winter Term gives students the opportunity to suggest courses they would like the Faculty to teach, or, where they have demonstrated outstanding abilities, to teach courses themselves under the supervision of a member of the Faculty.

In designing the Winter Term, the Faculty has sought to encourage adventurousness. It, therefore, stipulated that a department could require its students to take no more than two of its Winter offerings during four years, that a student may not pursue his Freshman and Sophomore Winter studies in the same department, and that over four years a student may take no more than three Winters in one department. There is no limit to the number of Interdepartmental courses a student may take. If a student takes an Interdepartmental course during his Freshman year, he may, as a Sophomore, take either another Interdepartmental course or any regular departmental course.

WINTER GRADING SYSTEM

In order that members of the Faculty might offer courses not suited to letter grading and that students might be encouraged to study subjects unfamiliar to them, Winter courses and Independent Projects are graded as Pass, Fail, or Honors. In Winter courses which would lend themselves to the letter grading system, Pass is equivalent to a grade of C- or more. Winter Internships are not graded. If a student fails to meet the responsibilities attendant on Internship, he will receive no credit for the Winter Term and will have to make up the credit in a manner approved by the Curriculum Committee. For purposes of graduation, academic standing, probation, and other appropriate concerns, receiving credit for an Internship will be equivalent to a Pass grade and failure to receive credit shall be equivalent to a Fail.

Students who fail Winter courses, Independent Winter Projects, or Internships will be placed on probation and required to undertake studies, approved by the Curriculum Committee. Appropriate work in a summer school is frequently accepted. Failure in this work will normally result in dismissal from the College.

Continuing work, such as a thesis, Honor project, or Senior Independent Study, which is either begun, continued, or completed during the Winter Term, will be graded under the letter system when the work has been completed. Prior to that time the work will receive an "In Progress" grade of Satisfactory or Unsatisfactory.

All other Winter work must be completed by the end of the Winter Term. Grades of Incomplete will be submitted according to the usual procedures, and students receiving such grades must complete their work satisfactorily by the end of the Spring Term immediately following.

WINTER INTERNSHIPS

Winter Internships are designed to permit students to gain practical experience in significant areas of professional or service activity on or off campus.

Internships must be sponsored by a member of the College Faculty or staff who is qualified to judge whether the proposed Internship is of sufficient scope to be of value and to assess the results of the Internship experience. In addition to a campus sponsor, the student must have a written confirmation of his project from an on-site supervisor who is willing to write an assessment of the student's work as an Intern. At the end of the Internship, the student, his on-campus sponsor, and his on-site supervisor must submit evaluation reports to Dean Turner, Chairman of the Curriculum Committee.

A student may not take more than two Internships during his four years.

AUDITING

The Faculty encourages students to audit Winter courses. Instructors will accommodate as many auditors as the nature of their courses and the facilities available to them permit. To audit a course students need only obtain the permission of the instructor-in-charge.

INTRODUCTORY FOREIGN LANGUAGE PROGRAMS

Foreign language courses, numbered 101 during the Fall Term, will continue during the Winter Term. Each student, currently taking such a course, who expects to enroll in 102 in the Spring must arrange a schedule for a continuing language program during the Winter Term. Students are to make these arrangements with their current language instructors at class meetings during the week of December 6 through 10.

Final examinations in language courses, continued during the Winter, will require no preparation beyond that given at weekly drills and laboratory sessions. Grades in continuing language programs will be incorporated into Spring grades in those courses. Students are not normally permitted to take two 100-level courses in foreign languages simultaneously, and no student will be required to participate in two continuing language courses during one Winter Term.

Students who continue their studies of an introductory foreign language during the Winter must also pursue a Winter course or Independent Winter Project.

PHYSICAL EDUCATION PROGRAM

For complete program description, see Spring Term section of Registration Catalogue. Winter Program Term instructional courses will include the following: badminton, beginning ice skating, gymnastics, ice figure skating, ice fishing, modern dance, riding lessons, scuba, ski lessons, ski touring, and beginning swimming. Fees for riding and ski lessons. Specific information will be available at the time of registration (Nov. 29, 30 and Dec. 1 at the McCullough Office).

WINTER LECTURE SERIES

The hour between 4:30 and 5:30 in the afternoon has been set aside daily during the Winter Term for a Lecture Series in Dana Auditorium. The topics of these lectures will vary from the academic to the sublime, and will bear no evident relation to one another. The Faculty hopes that students as well as instructors, either individually or as panels, will participate in this Series. Students wishing to speak should make arrangements through Professor Peterson.

BOARD REBATES

Students who study off-campus for two weeks or more during the Winter Term are entitled to rebates of part of their board charges. Students wishing rebates should see Dean Wonnacott by December 17.

CLASSES

The Winter Term will begin on Wednesday, January 5. Due to the brevity of the Term and the infrequent meetings of many courses, it is imperative that each student attend his first class. At the first meeting of each course, students will be given a schedule of subsequent classes.

The following courses are offered in Winter Term, 1972. They are arranged according to department, with the single exception that Interdepartmental courses are listed at the beginning and cross-referenced with the departments of the instructors giving them.

The courses are numbered consecutively from 01.2 to 85.2 and should be registered for accordingly. (Only independent work -- 500, 600, and 700 -- does not have a decimal point.)

INTERDEPARTMENTAL

ID 01.2 Baudelaire - Manet: an Investigation of Interrelationships between 19th Century Literature and Painting in France Mr. Bernauer and Mr. Hunisak

Beginning with a series of lectures focusing on Baudelaire and Manet individually, this investigation will proceed to discussions and individual student reports. Various problems will be considered in this context: the extent of Manet's dependence on Baudelaire for the subject matter and content of his pictures; the tradition of art criticism and Baudelaire's position in light of that tradition; the question of "modernism" and its meaning when applied to literary and painterly styles; the intertwined legacy of these two masters up to and including fin de siecle symbolism. (A reading knowledge of French would be helpful, but is not necessary.)

Method of Instruction: Lectures, discussions and reports

Limit on Enrollment: 40

ID 02.2 Politics and Environmental Problems Mr. Blucher

An investigation of recent state and federal legislative attempts at solving our environmental problems. Particular attention will be paid to the environmental legislation of the 1969-70 Vermont legislature as well as federal attempts to control air and water pollution and how administrative actions inhibit or promote their successful implementation.

A major portion of the course will investigate the role of public and private groups in the implementation of environmental legislation. There will be an emphasis on student involvement with planning commissions, District Environmental Commissions, selectmen, legislative committees, and state administrative agencies.

Method of Instruction: Lecture, seminar, field works

Limit on Enrollment: 15

ID 03.2 The Literature of the First World War Mr. Conron and Mr. Price

The course will focus on the impact of the greatest cataclysm of western civilization on the literature of two cultures, England and America. It will begin with social history and move to the close study of poetry and fiction, including for contrast one Italian and one German war novel. Works by Robert Graves, Rupert Brooke, Wilfred Owen, Eric Maria Remarque, David Jones, Emilio Lussu, John Dos Passos, Ernest Hemingway, e. e. cummings, and others will be studied. Class will meet two hours a day, four days a week. Two ten-page papers will be required.

Method of Instruction: Lecture and Discussion

Limit on Enrollment: 40

ID 04.2 Descriptive Linguistics Mr. Dodge

A survey of traditional American descriptive linguistics. Primary concern will be for the internal structures of the English language: the sound system with practice in phonemic analysis, morphology, syntax, and a brief study of written langu-

ages and language classification. A knowledge of at least one foreign language is helpful but not prerequisite. Five one-hour lectures plus two laboratory-workbook sessions per week and two two-hour seminars during which students will work towards the production of a project or paper on a subject allied with their main fields of interest.

Method of Instruction: Lectures, seminars, laboratory-workshops

Limit on Enrollment: 20

ID 05.2 Ethics, Human Nature and Society — Mr. Ferm and Mr. Andrews

A critical examination of the relationship between ethics and various conceptions of human nature and society. The course will start with a discussion of some contemporary "ethical" issues, e.g., destruction and protection of human life. Various "answers" or "solutions" to these will be examined, particularly for the views of human nature and society implicit in them and/or from which they are derived.

Method of Instruction: Seminar

Limit on Enrollment: 40

ID 06.2 Music and Motion - The Relation of Dance and Sound — Miss Gulick and Mr. Todd

An investigation of the possible co-respondences between motion in music and motion in dance. The class will work and experiment with the following kinds of questions:

How do dancers and musicians deal with form, repetition, imitation, rhythm, pulse, and other problems common to both?
How can a musical idea be transferred into body movement?
How might an aural structure be manifested in a silent (visual) structure?
How are musical forms and choreographic forms related?

These problems will be investigated in three places: the dance studio, the classroom, and the record library. As a performing workshop, the course will culminate in a public program. No experience necessary.

Method of Instruction: Lectures, technique classes in choreographic and compositional techniques, i.e., studio work

Limit on Enrollment: 20

ID 07.2 An introduction to Joyce's Finnegan's Wake through Form Analysis — Mr. Harris

The Wake is often one way or another off limits to literature students, who are trained in literary techniques which do not prepare them for this. The course will approach the work through form, based on THAT WHICH IS: phonemes, morphemes, etc. In other words the basic linguistic phenomena of the work will be studied as such, and arranged into meaningful systems. Through these means the student will "take possession" of certain parts of the Wake, after which the book will be able to speak to him, through form meaning and denoted meaning. This is certainly the only way for this book to be read fruitfully.

Method of Instruction: Seminar

Limit on Enrollment: 20

ID 08.2 Contemporary Human Ecology — Mr. A. Nelson and Mr. S. Bennett

A comprehensive examination of the ecology of Man including population dynamics, natural resources, ecological systems, and pollution as well as political, economic and social considerations. The requirements and prospects for continued human survival will be considered. Students will undertake term studies of specific environmental topics relevant to Vermont or New England.

Method of Instruction: Lectures, readings, seminars, guest speakers, films and field trips. Close contact of the group in residence will contribute to an intensive learning situation.

Limit on Enrollment: Twenty-five students, including some from other New England Colleges.

Fee: $120.00 contribution to the cost of room and board at the Vermont Environmental Center. (Board rebates are available from the College.)

Prerequisite: Selection by interview before December 7. Contact the Director, Vermont Environmental Center, Ripton, Vermont 05766, Telephone 388-7833.

ID 09.2 Introduction to Filmmaking — Mr. Ricos '73 (in cooperation with Mr. Teush)

A detailed presentation of the steps that a film undergoes from the preparation of the script to its final release. Different production techniques, both in professional and underground ("independent") filmmaking will be discussed in an attempt to demonstrate the potentialities and limits with which a director is presented at the moment when he decides to create a film. How meanings give rise to technical solutions to express them, and how solutions to technical problems sometimes give rise to meanings.

The twofold aim of this is (a) to increase the student's sensitivity toward understanding a film as viewer and (b) to allow him to discover for himself through brief assignments in actual script-writing, shooting and editing some of the expressive potentials of film as a visual art.

Method of Instruction: Demonstration, Discussion, Practical Exercises

Limit on Enrollment: 15

ID 10.2 The Consequences of a Stable Population — Mr. Van Vleck and Mr. Wolff

When the populations of the United States and the world stop increasing, what will be the social, economic, biological, and political consequences? The answers to this question will be researched and discussed. Emphasis will be on the United States, with frequent reference to other countries. Daily meetings for at least half the term. Individual oral reports and/or paper. Invited guest lecturers.

Method of Instruction: Lecture - seminar

Limit on Enrollment: 40

ID 11.2 Methods of Foreign Language Teaching Mr. Vail

The course will begin with a critical review of the ideologies and methods confronting the teacher of a modern foreign language and their relevance to his tasks. The idea of this portion of the course is not only to acquire an historical background in the development of the different methods of foreign language instruction but also to develop one's own views and to discuss them.

The second part of the course will derive directly from the initial discussions: it will deal with concrete methods of constructing programs of teaching and with such topics as textbook selection and methods of supplementing existing books. Specific areas will be discussed in depth, providing models for the development of new materials.

The final portion of the course will attempt to examine the realities of foreign language teaching. After having established our terms, we will visit different schools and discuss problem areas with teachers and those involved in teacher training at both the High School and College levels. (Appropriate for Teacher Education - Secondary.)

Method of Instruction: Class discussions and visits to schools

Limit on Enrollment: 20

AMERICAN LITERATURE

AL 12.2 An Investigation of Black Literature in America from the Genesis of Black Folk Expression in Africa Mr. Beck

Beginning with a brief study of Ashanti and related African cultures as reflected in their oral expression, this course will move through a survey of related expressions current in the West Indies and the United States. The Black folk expression and literature of this country will be evaluated against the African background on the one hand and the Anglo-American background on the other. From an investigation of oral American Black tales and songs, the course will move into the more formal literature of record, including not only material by but about Blacks.

Method of Instruction: Lecture and discussion

Limit on Enrollment: 30

AL 13.2 The Poetry of John Berryman Mr. Stitt

The course will study the development and achievement of this important contemporary poet. Works to be covered will include the early Short Poems, Homage to Mistress Bradstreet, The Dream Songs, and some of the most recent work, perhaps as represented by Love and Fame. Extra attention will be lavished upon The Dream Songs as what most critics regard as Berryman's most original work.

Method of Instruction: Seminar with oral reports, discussions and a long paper.

Limit on Enrollment: 20

See also: INTERDEPARTMENTAL 03.2 The Literature of the First World War
Mr. Conron and Mr. Price

AR 14.2 The Art Nouveau Mr. Andres

An examination of this brief and well-defined style (which invaded almost every aspect of design in the 1890's and early 1900's) as an exercise in connoisseurship and exhibition practice. Lectures will investigate the origins and manifestations of the Art Nouveau in Europe and the United States. Students will then seek and select local examples of the style for exhibition. They will write catalog entries for their selections and collectively mount an exhibition to be held in the Johnson Gallery in February 1972.

Method of Instruction: Lectures, independent research, exhibition

Limit on Enrollment: 30

AR 15.2 Woodcut Mr. Bumbeck

Studio course in the expression, design and technique of relief printmaking - emphasis on the fundamentals of woodcut with further study of contemporary innovations, monochrome and in color.

Woodcut differs from AR 316 which is essentially metal plate intaglio printmaking. It is largely a subtractive process involving the direct cutting of a flat surface (usually wood) which is then rolled with ink (like type) and printed under pressure. Our large etching press can be adjusted to print woodblocks. The relationship of the concept to the finished print is more direct, frequently bringing a more spontaneous spirit to the medium.

Method of Instruction: Studio and individual and group criticism

Limit on Enrollment: 20

Prerequisites: Design or portfolio

AR 16.2 Basic Sculpture Mr. Perlman

A studio course exploring the basic principles of sculpture. Emphasis on work in the studio in a variety of material. Group projects such as large outdoor sculpture. Intensive critiques to establish a questioning attitude towards sculpture and to discuss each group member's work in depth.

Method of Instruction: Studio and individual and group criticism

Limit on Enrollment: 20

Prerequisites: AR 103, 104

AR 17.2 From "Ma Jolie" to "Marilyn Monroe": Simulating Recent Masters Mr. Reiff

This course combines aspects of studio and art history in an investigation of recent trends in modern art. The student will be presented with the kinds of problems and challenges artists faced at certain, often critical stages in the development of

painting of the past half-century. The student, it is hoped, will relive a given phase of historic experience in the studio and arrive at certain conclusions pictorially, not unlike those of such artists as Picasso and Andy Warhol. At several points in the winter session, lectures will be given to demonstrate the ways artists of the recent past have accomplished similar aims. The five phases of artistic development to be studied are: Cubism, Fauvism, Surrealism, Abstract Expressionism, and Pop Art.

Students are expected to supply their own paint, canvas or board, turpentine, and brushes.

Method of Instruction: Lecture and studio

Limit on Enrollment: 20

AR 18.2 The Cultural Presence of Leonardo da Vinci Mr. Turner

This course addresses itself to the proposition that the meaning of a work of art involves both the physical object itself, and the accumulated critical writing about that object and the maker. Works of art as physical objects change in the passage of time, but a more profound change is worked by new works of art and the written words carried out in response to the original objects. So we will examine Leonardo in the context of the life and times of such figures as Walter Pater, Oscar Wilde, Sigmund Freud, Benedetto Crose, and Paul Valery.

Method of Instruction: Lectures and discussions, with a concluding paper in which the student will be asked to explore a personal position in regard to contrasting modes of art criticism.

Limit on Enrollment: 20

Prerequisite: AR 101 is recommended, but not prerequisite

See also: INTERDEPARTMENTAL 01.2 Baudelaire-Manet Mr. Bernauer and Mr. Hunisak

BIOLOGY

BI 19.2 Populations and Communities Mr. Bell

The course will be concerned with current research on the growth and regulation of animal populations and the structure of ecological communities. Topics will include the nature of population growth, regular and irregular fluctuations, the regulation of population size and diversity and community stability. The human population "problem" will be discussed only as it relates to these topics as an animal population.

Method of Instruction: Mainly seminars with some informal lectures during early sessions, much reading of original scientific papers

Limit on Enrollment: 20

Prerequisites: A background in the biological sciences is recommended for students planning to enroll in this course; adequate preparation would include BI 110 and/or a course in ecology or genetics.

BI 20.2 O Death, Where is Thy Sting?: biological and sociological aspects of ageing and dying — Mr. McDonald

A brief look at what is known of the biology of the processes of ageing and senescence; a comparison of attitudes towards death and dying in various societies past and present; and an investigation of our attitudes towards old people and the provisions we make for their care. An argument will be mildly presented for population control, if we are to have it, through death enhancement. Readings will be selected from novels, reports on old people's homes, essays, and newspaper and journal articles.

The course is not recommended to the squeamish.

Method of Instruction: Discussions based on readings common to the group; occasional lectures, and possible a term paper

Limit on Enrollment: 20

BI 21.2 Lipids — Mr. Watters

An analysis of the cellular functions of phospho-lipids, sterols and other fatty substances in light of their molecular properties. The course will examine specifically various techniques for the qualitative and quantitative determination of various classes of cellular lipids.

Method of Instruction: Lectures, discussion and laboratory work

Limit on Enrollment: 20

Prerequisites: CH 242 or permission

BI 22.2 Folklore, Druids and Pussycats — Mr. Woodin

An investigation into the mystique of plants and animals. Throughout human history, other organisms (with or without souls) became so interwoven with Man's daily life that they developed into symbols for his expressions, sentiments, passions, affections, beliefs, religions, fears and superstitions. Considerable folklore developed to substantiate and perpetuate these relationships which, much to our surprise, have often had basis in fact.

Method of Instruction: Lectures, guest speakers and student presentations. Grading on basis of term paper and student discussions and presentations.

Limit on Enrollment: 20

See also: INTERDEPARTMENTAL 08.2 Contemporary Human Ecology — Mr. A. Nelson and Mr. S. Bennett
10.2 Consequences of a Stable Population — Mr. Van Vleck and Mr. Wolff

CHEMISTRY

CH 23.2 Chemistry for Innocents — Mr. Gleason

The course will develop some of the major theories of chemistry in historical perspective using a phenomenological approach. The history of chemistry to the advent of quantum mechanics will be sketched. Students will explain in writing natural phenomena on the basis of their experience and an analysis of facts made available by the instructor. The course will be of no value to anyone who has had any college science. (There are a lot of you out there!)

Method of Instruction: Lecture and Discussions

Limit on Enrollment: 40

CH 24.2 Glassblowing — Mr. Harnest

A practical course in the art of blowing glass in the construction of glass apparatus for science projects. The laboratory experience will start with mastering the simplest operation of joining two pieces of glass tubing of the same diameter (straight joint) and progress to increasingly sophisticated joints, hopefully including the difficult ring and Dewar (thermos bottle) seals. Instrumentation experience will include use of glassblowing lathe.

Method of Instruction: Lecture - demonstration, and laboratory

Limit on Enrollment: 10

CH 25.2 Chemical Symmetry and Group Theory — Mr. Roberts and Mr. Scaife

A study of symmetry elements and symmetry operations which are then examined in the exquisite framework of group theory. The mathematical principles are simple and will be developed as the course progresses. The theory will be applied to problems of atomic and molecular structure. The ultimate purpose of the course is to arm the student with the great power of group theory to simplify complicated structural problems to solvable proportions.

Method of Instruction: Informal lecture-seminar meetings

Limit on Enrollment: 40

CH 26.2 Photochemistry and Photophysics — Mr. Schuh

An intensive introduction to the history, theory and practice of molecular photochemistry and photophysics, that area of chemistry devoted to the chemical changes and photophysical processes initiated by the absorption of energy in the form of electromagnetic radiation.

Method of Instruction: Lectures, independent study, and frequent one on one or small group discussions

Limit on Enrollment: 40

Prerequisite: CH 242

CLASSICS

CL 27.2 The Roman Origins of Our Calendar — Miss Heibges

A study of the Republican and Julian Calendar, the names of months, monthly divisions, work days, feast days and their connection with Roman divinities, places and temples in the city of Rome. The course will trace the survival of pagan festivals in the Christian Calendar of the Saints and the method of Roman time reckoning to our own day. Major source books will be W.W. Fowler's Roman Festivals, Sir James G. Frazer's edition of Ovid's Fasti, H.J. Rose's, Ancient Roman Religion and Ernest Nash's Pictorial Dictionary of Ancient Rome. The students will be invited to present comparative materials from other cultures.

Method of Instruction: Seminar

Limit on Enrollment: 20

See also: INTERDEPARTMENTAL 04.2 Descriptive Linguistics — Mr. Dodge
07.2 Introduction to Joyce's Finnegan's Wake through Form Analysis — Mr. Harris
11.2 Methods of Foreign Language Teaching — Mr. Vail

ECONOMICS

EC 28.2 Why did Bretton Woods Break Down? — Mr. Claudon

As of fall, 1971, the collapse of the Bretton Woods system of international monetary relations appears imminent. The world community seems no longer able to sustain fixed exchange rates, tied to the U.S. dollar, which is in turn tied to gold.

The focus of this course will be on two pertinent questions: (i) What are the basic causes underlying international financial crisis and conflict? (ii) What are the policy alternatives for improving the operation of the international monetary system?

Method of Instruction: Lecture/seminar combined

Limit on Enrollment: 40

EC 29.2 Is Economics Establishmentarian? — Mr. Craven

The class will study and evaluate a wide range of critical analyses and commentary, right and left, bearing on the American economy and on conventional economic wisdom. Attention will be confined to issues of the later post World War II period.

Method of Instruction: Discussion, seminar

Limit on Enrollment: 20

EC 30.2 Problems in Personal Finance — Mr. Smith

The course will study insurance (life and property), short-term borrowing, home buying, building, and financing, alternative forms of saving and investing, and

the structure of federal, state, and local taxes. It seeks to be directly useful to students whose knowledge of these areas is modest.

Method of Instruction: Lectures, discussions and guest speakers

Limit on Enrollment: 30

EC 31.2 Wall Street — Mr. Waters

Wall Street and its institutions: their description, history, and theoretical functions in the American capital markets.

Method of Instruction: Combination lecture-seminar course

Limit on Enrollment: 40

See also: INTERDEPARTMENTAL 10.2 The Consequences of a Stable Population
Mr. Van Vleck and Mr. Wolff

ENGLISH AND DRAMA

ED 32.2 Voice in Poetry — Miss Barker

The class will work closely with a variety of poems in order to define the concept of voice. Each student will write poems regularly in the attempt to understand better his own voice.

Method of Instruction: Seminar

Limit on Enrollment: 14

ED 33.2 A Reader's Theater: Oral Interpretation of Literature — Mr. DeLetis

The course will center around an attempt to understand the "music" of literature -- its tones, its rhythms, its play of sounds. Students will experiment with the oral presentation of poetry, prose, and drama in solo and duet readings. In addition, students will be required to structure public presentations of their readings, and the course will culminate in a group performance of the best works.

Method of Instruction: Group discussions, individual practice sessions, group rehearsals

Limit on Enrollment: 12

ED 34.2 Composition — Mr. Hill

The course is designed for students interested in writing. The subject matter will be provided in part from the instructor and in the main from the student's own experience. There will be five, one hour class meetings each week for four weeks. Students will submit written work for each meeting and that, in turn, will provide the subject for discussion in the following day's meeting.

Method of Instruction: Seminar

Limit on Enrollment: 15

ED 35.2 Creative Writing: Short Fiction — Mr. Martin

For about a week several collections of modern short stories by James Joyce or Sherwood Anderson, Ernest Hemingway and one contemporary writer will be read and discussed. During the remainder of the term, each student will write first on a series of assigned subjects and then he will write and revise several original stories. Special workshops will be conducted by visiting writers.

Method of Instruction: Seminar

Limit on Enrollment: 15

ED 36.2 A Shakespearean reading of Freud — Mr. Pack

Two structures of "tragic" thinking will be analyzed and compared, focussing on what Freud calls "the family romance". Plays by Shakespeare: Henry IV, part I, Hamlet, King Lear, The Tempest. Works by Freud: An Outline of Psychoanalysis, Three Essays on Sexuality, The Future of an Illusion, Totem and Taboo, Beyond the Pleasure Principle, Civilization and its Discontents. Guest lectures by Dr. Cubeta.

Method of Instruction: Seminar

Limit on Enrollment: 20

ED 37.2 Contemporary Poetry-Women Authors — Mrs. Peters

Using some background material from contemporary women thinkers (de Beauvoir, Millet, Firestone), we will look at the work of eight female poets: Plath, Wakowski, May Swenson, Shirly Kaufman, Marge Peircy, Ann Sexton, Erika Mann, Denise Levertov. We will try to assess to what extent the poetry can be analyzed from the point of view of "The Woman Question" and how much being a woman influences thethe nature of the poetry written. (The list of authors is tentative.)

Method of Instruction: Seminar

Limit on Enrollment: 20

ED 38.2 Hamlet - Design and Production — Mr. Potter

Planning and work on staff and crews for production of Hamlet. Performances March 2-5. The most intensive preparation will be done during Winter Term; calls will normally by afternoons, Monday thru Friday. Spring Term extracurricular commitments will be limited, as nearly as possible to final rehearsals, performances and strike.

Opportunities for advanced work in design for students who wish to start before Christmas vacation. Students interested in the course should consult instructor prior to registration.

Method of Instruction: Studio, workshop, performance

Limit on Enrollment: 20

ED 39.2 Censorship: Areopagitica to Lady Chatterley's Lover Mr. Prickitt

A consideration of some key issues in the history of censorship in Great Britain and the United States from the 17th century to the present day. Readings and discussion will explore reasons for censorship, means of censorship, and reactions to censorship.

Method of Instruction: Discussion

Limit on Enrollment: 20

ED 40.2 Fellini: The Divine Circus Mr. Teush and Mr. Littlefield

An intensive study of selected films of Federico Fellini, including "I Vittelloni"; "LaStrada"; "La Dolce Vita"; "8 1/2"; "Giulietta of the Spirits"; and "The Clowns."

Method of Instruction: Screening, lecture and discussion

Limit on Enrollment: 80

ED 41.2 Hamlet - Study and Production Mr. Volkert

A study of the script, with the advice and assistance of willing experts on campus. After preliminary study, analysis will continue at each rehearsal, leading to better understanding of the play and each character before actual production.

Study and rehearsal periods will take place during approximately six hours per day (morning and evening) 4 days per week and 4 hours on Sunday evening. Not all members of the class will need to be present at all rehearsals. Production dates will be March 2, 3, 4, 5.

Method of Instruction: Visiting lecturers from our campus; discussions; rehearsals with continuing analysis and discussion.

Limit on Enrollment: 30

See also: INTERDEPARTMENTAL 03.2 The Literature of the First World War Mr. Conron and Mr. Price
04.2 Descriptive Linguistics Mr. Dodge
07.2 Introduction to Joyce's Finnegan's Wake through Form Analysis Mr. Harris
09.2 Introduction to Filmmaking Mr. Ricus '73 (with Mr. Teush)

FRENCH

FR 42.2 The Practice and Theory of Teaching French Mr. Barenbaum

Observation, then work with a class of beginners in the College and classes at different levels in neighboring high schools. Reading and discussion of recent articles in French Review, The Modern Language Journal and Le Français dans le Monde with special attention to the work of Wilga Rivers. (Appropriate for Teacher Education - Secondary.)

Method of Instruction: Observation and discussion

Limit on Enrollment: 6

Prerequisites: Open to five or six selected students. Please see Professor Barenbaum.

FR 43.2 Introduction to the Literature of French Canada — Miss Beaton

A study of the themes in the works of Louis Hémon, Saint-Denys Garneau, Gabrielle Roy, Anne Hébert, Alain Grandbois, Marie-Claire Blais, Gérard Bessette, Hubert Acquin, Jacques Godbout. Taught in French.

Method of Instruction: Seminar and discussion

Limit on Enrollment: 20

FR 44.2 The Art of Translating — Mr. Thiher

An introduction to the theoretical and practical problems encountered in translating literary works.

Students will meet daily with the instructor for two weeks and will discuss the difficulties they have in translating passages from English to French and French to English. The passages will be mainly selected from contemporary novels and plays. During the final three weeks of the term, each student will pursue an independent project, one leading preferably to the translation of some literary work.

Method of Instruction: Practical exercises and independent projects

Limit on Enrollment: 20

See also: INTERDEPARTMENTAL 01.2 Baudelaire-Manet — Mr. Bernauer and Mr. Hunisak
04.2 Descriptive Linguistics — Mr. Dodge
11.2 Methods of Foreign Language Teaching — Mr. Vail

GEOGRAPHY

GG 45.2 Vermont: Physical Resource Base and Economic Development — Mr. Illick and Mr. Hovinen

Students will select and examine an economic or environmental topic or problem in Vermont. Each student will produce a map illustrating the spatial patterns as well as a short text explaining these patterns. Statistical, photographic, and other techniques may also be employed.

Method of Instruction: Seminars, group field trips, and laboratory sessions

Limit on Enrollment: 40

Prerequisite: GG 102

GG 46.2 World 2000 Mr. Malmström

A future-oriented, computerized game in which each student assumes the leadership of an existing country. After an initial period in which an inventory of the country's resource potential and current problems are assessed, each class-day thereafter becomes a one-year projection in time, the objective of the game being to see which countries can survive until the dawn of the 21st century and by what means. Necessary computer skills will be developed in class. A final paper will be required of all students ("non-survivors" as well as "survivors") evaluating the aims, methods, and results of the course.

Method of Instruction: Seminar/laboratory

Limit on Enrollment: 29

Prerequisite: GG 101

GEOLOGY

GG 47.2 The Role of Mineral Resources in Our Society Mr. Baldwin

The high degree of industrialization of Earth is based on raw materials. What geologic processes concentrate iron, copper, uranium, oil? How does coal or glass sand form? What are the reserves? How does the geographic distribution affect economics and politics, on a national or international level? Who owns a mineral deposit?

In scheduled workshops, students will study mineral and rock specimens, and will interpret geologic maps of mineral districts; brief lectures will help provide an understanding of geologic processes. We plan to visit several underground mines and quarries in the vicinity.

Concurrently, each student will prepare a term paper on some aspect - whether geologic, economic, political, or legal -- that interests him; regular meetings will provide opportunity to monitor progress, resolve difficulties, and discuss findings.

Method of Instruction: Lectures, workshops, field trips

Limit on Enrollment: 40

Prerequisites: No geology background needed

GG 48.2 Research in Plate Tectonics Mr. Coney

The instructor will be engaged in research for publication on global lithosphere plate motions and related tectonic response. Qualified students are invited to participate. The term will be spent determining present plate motions and related tectonic process extrapolating back to selected as yet enigmatic patterns in Phanerozoic mountain systems. The term will be strongly "mission oriented" and participants should expect to work Monday through Friday 8:30 AM to 5:00 PM, and occasional evenings.

Method of Instruction: Individual projects in consultation with instructor

Limit on Enrollment: 20

Prerequisites: Majors in geological science should have had training in petrology, and tectonics (GG 282). Majors in Physics and Chemistry can be accommodated, and a student interested in computerization of equations in spherical trigonometry is urgently needed. One or two students with training in biological science interested in statistical analysis of faunal and floral distributions as related to disparate motions of North America, South America, Europe, and Africa can also be accommodated. Non-majors should consult with instructor.

GERMAN

GN 49.2 Masterpieces of Medieval German Literature — Mr. Grundlehner

Concentrating on the German epics Parzival, Tristan, the Nibelungenlied, and Gregorius, this course will show the complexity of the medieval mind in its attitudes toward love, sex, war, and religion. Fresh interpretations of lyric poetry (Minnesang) will reveal the knights' obsession with the erotic and erratic. Was courtly love sincere or merely convention? Course will be augmented with recordings and live presentations by Middlebury minstrels. Other topics to be considered will be the conflict between Christianity and paganism and the place of the individual within the structures of medieval society. Finally, the Ploughman of Bohemia will be used to illustrate the transition between the Middle Ages and the Age of Humanism-- the emergence of man as the centerpoint of existence and the consequent dissolution of church hegemony.

Method of Instruction: In English. Lecture, imagination, and discussion. 10-page paper.

Limit on Enrollment: 20

See also: INTERDEPARTMENTAL 04.2 Descriptive Linguistics — Mr. Dodge
11.2 Methods of Foreign Language Teaching — Mr. Vail

HISTORY

HI 50.2 Abraham Lincoln in History and Legend — Mr. Catton

A seminar devoted to an analysis of Abraham Lincoln as politician and statesman, with emphasis upon (1) the opinions of various important contemporaries and historians, (2) the truths and distortions in the "Lincoln Legend", and (3) the principal speeches and writings of Lincoln himself. Each student will write a 10-15 page paper on some aspect of Lincoln's thought or career.

Method of Instruction: Seminar

Limit on Enrollment: 30

HI 51.2 Communism in China: An Historical Approach — Mr. Clifford

A study of the communist phase of the Chinese revolution of the 20th century. Readings will be both literary and political, and where possible will be drawn from the

writings of the participants themselves, in order to try to understand their vision of the revolution and its place in China's history.

Method of Instruction: Seminar

Limit on Enrollment: 40

HI 52.2 The Causes and Origins of War - an Historical Study Miss Lamberti

Studying and comparing the outbreak of wars separated in time and circumstances, the class will answer the questions of what determined the belligerent behavior of nations, governments, and particular groups within the society, and what was the nature of the crisis that triggered war. Analyzing the historical data, the class will try also to discover recurring patterns and constant determinants and to arrive at general propositions for formulating a conceptual scheme or theory on the causes and origins of war. The second part of the course will be oriented toward the present. Some questions that the class may wish to discuss are: can the perspective of history help us in our study of contemporary wars? how can we prevent World War III? Is war inherent in human society? Is war a biological necessity, a sociological inevitability, or a bad invention?

Method of Instruction: Seminar discussion

Limit on Enrollment: 20

HI 53.2 Old Russian Towns Mr. Pereira

The course of instruction will be divided into two parts, the first of which will begin during Christmas vacation, in the form of an historical tour of the capitals of Old Russia, including Vladimir, Suzdal, Yaroslav, Pskov, Novgorod, as well as St. Petersburg Leningrad and Moscow. The second part of the course, roughly for the last three weeks of the winter term, will involve informal meetings between individual students and the instructor at Middlebury, leading toward the completion of a previously agreed upon project on some significant facet of the areas studied.

Introductory readings will be assigned well prior to departure for the USSR.

Method of Instruction: Field trips and seminars

Limit on Enrollment: 40

Fee: Approximate cost, inclusive of transportation and lodging, $500

HI 54.2 History of American Feminism Miss Strobel

An investigation of American Feminism; its roots in the natural rights tradition and the abolitionist movement; the struggle for equal rights which narrowed to the issue of suffrage; the relationship of medical practices and advances to the lives of women; growth of the female sector of the labor force; the decline and recent resurgence of feminism.

Method of Instruction: Seminar

Limit on Enrollment: 25

HI 55.2 Why Historians Write History — Mr. Tillinghast

Many reasons have been given for writing history. But what reasons can be given for immersing one's self in the past, rather than in the present or future? Is studying history in some way an attempt to avoid problems rather than to solve them?

Method of Instruction: Seminar

Limit on Enrollment: 20

MATHEMATICS

MA 56.2 Elementary BASIC Programming and Computer Concepts — Mr. Ballou and Mr. Bielli

For students with no previous programming experience. The elementary aspects of the BASIC language illustrated by exercises to be programmed and run on the teletypes.

Method of Instruction: Lecture and discussion

Limit on Enrollment: 30

MA 57.2 Abstract Set Theory — Mr. Carruth

A study of finite and infinite sets that includes both the concept of the cardinal number of a set and that of the order type of an ordered set.

Method of Instruction: Seminar

Limit on Enrollment: 39

Prerequisite: MA 113

MA 58.2 Games People Play — Mr. Olinick

An introduction to the theory of games of strategy. This may be described as a mathematical theory of decision-making by participants in a competitive environment. In a typical problem to which the theory is applicable, each participant can bring some influence to bear upon the outcome of a certain event; no single participant by himself nor chance alone can determine the outcome completely. The theory is then concerned with the problem of choosing an optimal course of action which takes into account the possible actions of the participants and the chance games.

Examples of games of strategy which will be examined are parlor games such as poker, chess, and bridge, military games such as defense of targets against attack, and economic games such as the price competition between two sellers. Students will be encouraged to invent new games and attempt to apply the theory to solve them.

Method of Instruction: Lecture and discussion

Limit on Enrollment: 39

Prerequisites: One college level mathematics course

MA 59.2 Hard Mathematics Made Easy (Or Easy Mathematics Made Hard) Mr. Peterson

Many of the most famous unsolved problems of mathematics can be completely understood without any mathematics beyond the usual high school algebra and geometry. In this course the class will be presented with a number of problems, without being told whether they are solvable or as yet unsolved. Each student will be expected to choose several problems and present both his successes and his failures to the class, which will criticize his efforts and suggest new approaches. In addition the class will be encouraged to speculate and conjecture on problems of its own devising. In the final week, those famous problems which remain unsolved will be exposed and discussed.

Most of the problems will be drawn from arithmetic and plane geometry. They may, however, be of a nature quite foreign to the usual high school approach.

Method of Instruction: Lecture and discussion

Limit on Enrollment: 39

MUSIC

MU 60.2 Organ Mr. Fanning

Concentrated lessons and practice on new Gress-Miles Organ.

Method of Instruction: Lessons and practice

Limit on Enrollment: 10

Prerequisites: Students interested in the course must consult instructor before registration.

MU 61.2 Music as Human Behavior: A Survey of World Folk Music Traditions Mr. Ronald Smith

An introduction to ethnomusicology and examination of music in terms of various aspects such as its sound properties, its functions and uses in different cultures, and concepts within these cultures which deal with aesthetics, creation and performance. To attain an in-depth knowledge of a people's music, one must view not only the product (music sound) but also the range of "acceptable" behavior which is characteristic of audience, performer and creator. Musics of western and non-western cultures will be viewed from the vantage point of their musical occasions, dance, rites of passage, magic and material culture.

Method of Instruction: Lecture and discussion

Limit on Enrollment: 40

MU 62.2 Instrumental Ensembles Mr. Todd

Rehearsing of works for large and small groups culminating in concerts and recitals.

Method of Instruction: Rehearsals and recitals

Limit on Enrollment: 40

See also: INTERDEPARTMENTAL 06.2 Music and Motion — Miss Gulick and Mr. Todd

PHILOSOPHY

PA 63.2 Critics of Morality — Mr. Bates

The course will begin with a brief discussion of the concept of morality which is formulated in the ethical philosophy of Immanuel Kant. It will then turn to selected works of four of the most important nineteenth century thinkers who challenge certain features of this conception of morality and who raise important new questions for moral theory. The authors read will include Schopenhauer, Kierkegaard, Marx and Nietzsche. Some familiarity with nineteenth century intellectual history would be helpful, but there are no specific course prerequisites.

Method of Instruction: Lectures and discussions
Limit on Enrollment: 25

PA 64.2 The Philosophy of Space and Time — Mr. Temin

A discussion of traditional philosophical problems about space and time as well as more recent ones. Topics such as the absolute and relational theories of space and time, physical geometry, non-Euclidean geometries, whether time has a flow or direction, measuring space and time, and the theory of relativity will be discussed. Reading will include selections from Newton, Leibniz, Kant, Mach, Einstein, Reichenbach, Minkowski, and more recent writers. It is recommended that participants also attend Professor Gould's course on the theory of relativity.

Method of Instruction: Lectures and discussions

Limit on Enrollment: 40

PHYSICAL EDUCATION

See: INTERDEPARTMENTAL 06.2 Music and Motion — Miss Gulick and Mr. Todd

PHYSICS

PH 65.2 Einstein's Relativity for the Relatively Uninitiated — Mr. Gould

Einstein's laws of relativity are sometimes called the grammar of physics. We shall study these laws, which are surprisingly and deceptively simple, for the most part as they apply to the motion and aging of objects. Once the laws have been presented and examined students will study, in individual projects, the effect of the laws on various areas of physics as benefits the individual's interest and background.

The use of the computer and plotter will be taught so they can be applied to problem solving.

Method of Instruction: Lectures

Limit on Enrollment: 40

Prerequisites: High School physics or permission. The course is not open to students who have taken PH 201 and it is not recommended to students who plan to take PH 201.

PH 66.2 Electronics for the Intimidated — Mr. Terwilliger

Intended for non-science majors who are mystified by electronics and want not to be, but who lack the physics and math required for the fall term electronics course, PH 221. The starting point of this course will be a review of basic (elementary and junior high school) principles of electricity and magnetism. The course will proceed as deliberately as possible through basic dc and ac electrical circuits and simple transistor circuits, and then skip to the operation and use of some solid state integrated circuits. Questions such as how a radio works and how to fix a hi-fi will be discussed in general terms. The emphasis throughout will be on physical explanations and direct experience rather than mathematical details of circuit design; however, some elementary trigonometry will be used.

Method of Instruction: Daily lecture/lab/discussion, plus reading assignments and either an experimental project or a short paper.

Limit on Enrollment: 20

PH 67.2 What Do You Want? Information — Mr. Wright

Regardless of whether ideas can have an independent, abstract existence, they are in fact stored and transmitted by physical means. The mind has body. Symbols which represent ideas or information in coded form are impressed on material systems and are hence subject to physical law. In any given case the important questions are: What types of symbols are most suitable? What limitations do physical uncertainties place on the accuracy of a stored or transmitted message? What coding schemes are most effective? A study of these questions has led to the modern development of the field of "information theory" which combines elements from linguistics, mathematics, and physics. To date it has been largely the province of those concerned with communications technology, data processing, radio astronomy and other areas of immediate application. It shouldn't be. The theory of information has profound practical and philosophic implications which are quite general in scope. The aim of the course will be to establish the basic principles of the subject and subsequently to expand their interpretation through discussion and informal experiments. Our topics may include primitive and futuristic signalling devices, genetic codes, holography, word games, auction bridge, cryptography and extrasensory perception.

Method of Instruction: Daily lectures and discussion

Limit on Enrollment: 40

POLITICAL SCIENCE

PS 68.2 Thucydides' History of the Peloponesian War Mr. Dry

"Thucydides, an Athenian, wrote the history of the war between the Peloponesians and the Athenians beginning at the moment it broke out, and believing that it would be a great war and more worthy of relation than any that had proceeded it.... Indeed this was the greatest movement yet known in history...." Thus Thucydides begins his History, which teaches us not only about a particular war but about war itself. But foreign policy turns out to be related to the internal order of a city. Hence the book contains a comprehensive reflection on the nature of political life. Where Plato and Aristotle concentrate on the best cities, known only in speech, Thucydides concentrates on actual cities engaged in the greatest motion.

Method of Instruction: Seminar

Limit on Enrollment: 40

PS 69.2 The Soviet Political Novel Mr. Fontaine

A study of selected Russian novels written during the Soviet regime. We shall examine them in terms of the political ideas expressed and as responses of the artist to an authoritarian regime that has graciously provided a model of good literature for its writers. Students, in addition, will be asked to write a critical study of one novel not dealt with in the course.

Method of Instruction: Seminar-lecture

Limit on Enrollment: 20

PS 70.2 The Science, Art, or Politics of National Commitment:
For What, For Whom, At What Cost? Mr. Hoag

Analysis of special country studies by the Senate Foreign Relations Committee, Pentagon Papers, and other sources derived from mutual study as time, energy and availability dictates. A cooperative venture between students and instructor, through oral reports, class discussion and a final written report.

Method of Instruction: Seminar

Limit on Enrollment: 20

PS 71.2 Models of War: Mapping and Measuring Pre-War Conflicts Mr. Leng

The class would work as a research team to construct and test hypothetical models of inter-nation behavior predicting to war. Propositions advanced by social scientists and other students of the causes of war would form the basis for the construction of empirical hypotheses to be tested against data collected on a sample of international conflicts occuring between 1815 and 1965.

Method of Instruction: Seminar and tutorial instruction

Limit on Enrollment: 12

PS 72.2 Political Campaigning Mr. Thurber

This course will involve close study of the presidential campaigns of 1960, 1964, and 1968 as background for a simulation of a presidential election campaign. In the course of the simulation, students will be required to develop strategy and tactics for both nomination and election campaigns, to select and develop issues for these campaigns, to analyze the electorate in terms of social, economic, and ethnic composition in order to determine responses to issues and candidates, and to deal with all of the problems involved in financing and publicizing a campaign.

Method of Instruction: Seminar

Limit on Enrollment: 40

See also: INTERDEPARTMENTAL 02.2 Politics and Environmental Problems Mr. Blucher

PSYCHOLOGY

PY 73.2 Biological Substrates of Learning and Memory Mr. Pellegrino

The principal focus of the course will be a critical examinaon of current physiological models of information storage and retrieval by the central nervous system. The relevant research literature in the areas of physiology, biochemistry, and pharmacology will be reviewed and presented by the students to the seminar.

Method of Instruction: Seminar

Limit on Enrollment: 20

Prerequisite: PY 301

PY 74.2 Behavior Technology: the Skinnerian Solution Mr. Prouty

The course will consider the argument of B. F. Skinner that the problems of man and society require the application of a technology of behavior and that operant conditioning can and should be the basis for such a technology. Skinner's more general writings, such as Walden II and Beyond Freedom and Dignity, will be considered, as well as case studies in behavior and control, and the operation of token economies. A sample of Skinner's outraged critics will be considered.

Method of Instruction: Seminar

Limit on Enrollment: 25

RELIGION

RE 75.2 Psychotherapy and Religion Mr. Rockefeller

The course will explore how ideas derived from psychoanalysis and other forms of psychotherapy have been used to develop understanding of the nature and function of religious faith and symbols. Readings will be selected from such authors

as Sigmund Freud, Carl Jung, Erich Neumann, Vicktor Frankl, Erich Fromm and Paul Tournier.

Method of Instruction: Discussion and paper

Limit on Enrollment: 20

RE 76.2 Is There A Conflict Between "Science" and Religion? Mr. Scott

The course will present selected issues for discussion: religious and scientific language, religious and scientific ways of knowing, and the moral implications of scientific endeavor.

Method of Instruction: Seminar

Limit on Enrollment: 40

See also: INTERDEPARTMENTAL 05.2 Ethics, Human Nature and Society Mr. Ferm and Mr. Andrews

RUSSIAN

RU 77.2 Socialist Realism: A Proletarian Episode in Middlebury Culture Mr. Motolanez

A studio course which will be a practical study of socialist realism. The students will learn by doing. Students may paint in oils, design posters and monumental frescoes; they may compose political slogans, write poetry, prose and librettos. However, all creative talent will be directed toward "...truthful, historically concrete representation of reality in its revolutionary development. Moreover, the truthfulness and historical concreteness of the artistic representation of reality must be linked with the task of ideological transformation and education of workers in the spirit of socialism." Meetings five days a week to create, and to study bourgeois and Soviet aesthetics.

Method of Instruction: Studio and discussion

Limit on Enrollment: 20

RU 78.2 Anton Pavlovich Chekhov: "You Live Badly, My Friends." Mr. Orth

An intensive, chronological study of Chekhov, the "twilight genius" of nineteenth century Russia, as a man and artist, beginning with the humorous stories of Antosha Chekhonte, continuing through selected short stories which reflect his development as a literary craftsman, and culminating with the four major plays which reflect his genius as a writer.

Method of Instruction: The course will be conducted entirely in Russian. Students will use Soviet editions of Chekhov rather than Western editions intended for students of the language. The class will meet for lectures and discussions 6 hours per week; it is assumed, however, that students will spend considerable time in independent reading and research. Each student will be responsible for

one oral presentation during the term, as well as for a short paper each week. At the end of the term each student will submit a term paper of undefined length on some aspect of Chekhov's art.

Limit on Enrollment: 20

See also: INTERDEPARTMENTAL 04.2 Descriptive Linguistics Mr. Dodge
11.2 Methods of Foreign Language Teaching Mr. Vail

SOCIOLOGY - ANTHROPOLOGY

SA 79.2 Sex Roles in Contemporary Society Mr. Fengler

An examination of current debates, problems and trends concerning discrimination on the basis of sex in American society. Sociological, social-psychological and historical material will be drawn upon to help understand the positions of women and men in the areas of family, work, politics, and education. While an investigation in detail of a subject touched in the course on The Family, students who have not had the latter will not be at a disadvantage.

Method of Instruction: Seminar

Limit on Enrollment: 20

SA 80.2 Collective Outbursts and Mass Behavior: Mobs, Riots, and Demonstrations Mr. Mick

Of all human activity, the mob remains one of the most mysterious, most criticized, and least understood manifestations. In this course we shall seek to determine characteristics, causes, and effects, of large-scale collective outbursts. Particular questions we shall treat include: whether or not crowds are unthinking swarms of people from the lowest social and economic levels of society; whether or not crowds can be differentiated--is the crowd at the sports arena the same as the crowd storming the Bastille; whether or not certain aspects of a society or culture are more or less conducive to crowd behavior; whether or not crowds fulfill some sort of religious, psychological, and/or emotional needs.

Required readings from 1) historical materials; 2) theoretical essays; 3) contemporary case studies.

Method of Instruction: Seminar

Limit on Enrollment: 30

SA 81.2 Knowledge and Society Mr. Nye

This is a course on the sociology of knowledge which is the systematic investigation of the social origins, development and transition of "knowledge" - (e.g. perceptions, beliefs, opinions, ideologies). Theoretical topics include the problems of objectivity, language use, correspondence and the construction, maintenance and alteration of social reality. More concrete topics concern the social origins and functions of highly divergent belief systems. Specific examples would be the comparisons of soci-

alism with capitalism, equalitarianism with various types of elitism and the older or more traditional religions with modern "quasi-religions" such as psychoanalysis and existing forms of revolutionary nationalism. Techniques of persuasion or propaganda are also discussed within the contexts of situations ranging from events of commercial advertising to instances of political brainwashing. Principal authors considered include Marx, Weber, Durkheim, Mannheim, Schutz, and Berger. The writings of non-sociologists such as Heidegger, Chomsky and Wittgenstein are also examined for sociological insights.

Method of Instruction: Lecture and discussion; possibly some seminar work depending on enrollment

Limit on Enrollment: 20

Prerequisites: Some background in sociology and philosophy is desirable but not necessary

See also: INTERDEPARTMENTAL 05.2 Ethics, Human Nature and Society Mr. Ferm and Mr. Andrews

SPANISH AND ITALIAN

SI 82.2 Naked Masks: The Theater of Pirandello Mr. Castiglione

The course will, through an examination of Luigi Pirandello's most representative plays, show the author's concern about some of the most vexing questions and problems that beset modern man: the unrewarding and elusive search for truth; man's vain efforts to know himself and his fellow man; the ever-changing aspects of man's personality.

Method of Instruction: Seminar. Taught in translation.

Limit on Enrollment: 40

SI 83.2 Reading Borges Mr. Ilgen

An exploration into the realms of imagination created by Jorge Luis Borges through the medium of his fiction. The work of the course will center principally on the critical reading, analysis and discussion of the stories contained in his two best known collections: Ficciones and El Aleph. Occasional incursions will be made also into the author's essays and poetry, as these prove useful for the further elucidation of the conceptual and symbolic worlds of the stories.

Method of Instruction: Seminar. Reading and discussion in English though students knowing Spanish are encouraged to read the works in the original.

Limit on Enrollment: 20

SI 84.2 Workshop in Spanish Conversation Mr. Kelsey

A structured course which will increase and perfect the student's fluency in spoken Spanish. Under controlled workshop situation which offers maximum freedom

of expression, there will be intensive discussion based on a large variety of contemporary materials of general interest from all areas of Spanish and Latin American media: film, taped TV and radio programs, periodicals and newspapers, recordings, etc. Special emphasis will be placed on variety and correctness of expression.

Method of Instruction: Seminar-laboratory

Limit on Enrollment: 15

Prerequisite: Spanish 201 or equivalent

See also: INTERDEPARTMENTAL 04.2 Descriptive Linguistics Mr. Dodge
11.2 Methods of Foreign Language Teaching Mr. Vail

TEACHER EDUCATION

TE 85.2 Problems and Issues in the Teaching of Reading Miss McGlynn

An investigation into the intellectual, physical, social and emotional problems involved in learning to read and a comparative analysis of several developmental reading programs. Designed primarily for students interested in elementary education.

Method of Instruction: Discussions, readings and observation of demonstration classes

Limit on Enrollment: 20

See: INTERDEPARTMENTAL 11.2 Methods of Foreign Language Teaching Mr. Vail
FRENCH 42.2 Practice and Theory of Teaching French Mr. Barenbaum

SPRING TERM 1972 CATALOGUE

Details on official policies regarding Degree Requirements, Departmental Programs, Grading, etc. may be found in the Middlebury College Handbook 1971-72 on Pages 31 through 44.

NORMAL PROGRAM

The normal program of study is four courses in the Fall and Spring Term. R.O.T.C. courses and required Physical Education are carried as electives without credit as a course unit. No extra charge is made for these programs. Only students who have demonstrated superior ability in their academic work are permitted to take more than four courses in a term. Students who wish to take fewer or more than four courses in a Fall or Spring Term must obtain permission from the Dean of Students.

FRESHMAN PROGRAM

Every freshman is required to enroll in English Literature (ED 101) either in the Fall or Spring term. Physical Education must also be taken by all Freshmen. To complete his academic program, each freshman elects three other courses from those open to freshmen. In general, only those courses numbered from 100 through 190 are open to freshmen. Freshmen enrolled in a course within a department, however, may be assigned to a more advanced course by that department upon demonstration of special proficiency.

MAJOR CONCENTRATION

In registering for his major program the student normally consults the chairman of his chosen department. The chairman appoints a departmental adviser who recommends a pattern of courses for the student's subsequent years.

In addition to the specific courses required for a particular major, cognate courses may be recommended to further the student's particular academic interests or intentions. Departments offer different programs of Senior Work adjusted both to the nature of the field and the needs of the student. Basically, a department may offer as many as three units of Senior Work outside the regular course pattern. This Senior work may consist of Independent Study (700 Course) and/or General Examination (705 Course unit), Senior Seminar (704) or Senior Course (710). Students should consult the descriptions of the Senior Work for each department for details. The Senior Work courses may be distributed over the Fall, Winter and Spring Terms.

Should a student not be satisfied with his first choice of major he may, before the beginning of his third year, change to another major. Prior to the change, however, he should obtain assurance from the department to which the change is contemplated that he will be able to meet its major requirements. After the beginning of the third year a student may change his major only for exceptional reasons and with the consent of the Dean of Students.

Where a joint major involving two or more departments is desirable a single General Examination may be required. Details should be worked out with the department chairmen involved.

DEGREE REQUIREMENTS

In addition to the freshman and major requirements, certain additional requirements must be met before the Middlebury College degree is awarded.

1. To be eligible for a degree a student must successfully complete 32 Fall and Spring term courses or their equivalent and 4 Winter courses. No more than 14 Fall and Spring

courses may be in the same department. A minimum of 10 courses must be completed in the major. Not more than 6 courses with a D grade may be applied to the degree requirement.

2. Freshmen may not elect more than one course in a subject in a term.

3. The last academic year of undergraduate work must be spent in residence in Middlebury, except as provided in the Technical, Medical, and Dental School Plans.

4. All students are required to complete one year of Physical Education.

SPECIAL PROGRAMS

Combined Professional School Plans and Pre-Medical or Pre-Dental Programs. Students preparing for engineering, architecture, medicine, or dentistry should consult advisers to see material in the Catalogue-Record. Any freshman even tentatively committed to pre-professional studies should consult Dean Walter A. Moyer, Jr., Chairman, during the Fall term. Others may consult him about any changes in requirements.

Environmental Studies. Middlebury College offers an interdisciplinary major in Environmental Studies, with Fields of Emphasis in Ecology, Environmental Chemistry, Environmental Geology, Human Ecology, and Environmental Physics. Students interested in this program should consult Professor H. E. Woodin, Coordinator of Environmental Studies, about specific course requirements. This program is best started in the freshman year. Consult advisers to see material in the Catalogue-Record.

Junior Year Abroad. Students interested in a Junior Year Abroad program should discuss their plans early with their faculty adviser and the Dean of Students. Consult advisers to see material in the Catalogue-Record.

Critical Languages Cooperative Program With Princeton University. This is a junior year program in the areas of Arabic, Chinese, Japanese, Persian, Russian and Turkish. Consult advisers to see material in the Catalogue-Record.

Teacher Education Program. Middlebury offers an interdisciplinary program of courses to prepare interested students to teach elementary or secondary school by introducing them to the appropriate areas of scholarship in history, philosophy, psychology, and sociology in addition to courses offered in Teacher Education. For a complete description of this program, see Teacher Education course listings.

Military Science Program. The Army Reserve Officers' Training Corps (ROTC) unit provides a voluntary program in Military Science which prepares selected students for a commission as a Second Lieutenant in either the Regular Army or the Army Reserve. A complete description of the program is given with Military Science course listings.

Washington Semester Program. Selected students each year spend one term in the national Washington Semester Program administered by American University. Interested students should contact Professor Leonard Hoag, Political Science Department.

DEPARTMENTS OF INSTRUCTION

All courses are given as term courses with the exception of Senior Work (700) and 500 courses in an Honors Program. These course numbers may signify on-going work, and in such event are marked "S" (Satisfactory progress) or "U" (Unsatisfactory).

Courses numbered 100-199 are usually taken by freshmen; 200-299, by sophomores; 300-399 by juniors; 400-499, by seniors. Schedules are cleared on this basis and conflicts will thus be most easily avoided by taking courses in proper sequence.

At the head of each departmental section, the major is described and the requirements for a major in that department are stated, together with recommended courses.

Prerequisites to a course are shown in parentheses. Courses not being offered in 1971-72 are bracketed. Abbreviations include: Lab., laboratory period; Lect., lecture period.

The College reserves the right, without further notice, to cancel any courses herein described, or to make any other changes in staff, fees, and courses which may be deemed necessary.

The Departments of Instruction are organized in four Divisions: Humanities, Foreign Languages, Social Sciences, and Natural Sciences.

Division of the Humanities

American Literature	Music
Art	Philosophy
English and Drama	Religion

Division of the Foreign Languages

Classics	Russian
French	Spanish and Italian
German	

Division of the Social Sciences

Economics	Psychology
History	Sociology-Anthropology
Political Science	Teacher Education

Division of the Natural Sciences

Biology	Mathematics
Chemistry	Physical Education
Geography and Geology	Physics

See Autumn Term Registration Catalogue for listing of Fall Term Courses.

INTERDEPARTMENTAL

ID 300 Sound and Stone, A Comparison of Music and Architecture Spring

An interdisciplinary study of architecture and music with a view toward establishing similarities and differences in the creative approaches of these two arts. Questions of common aesthetic premises will be examined as well as the different possibilities inherent in each medium. The course will test the validity of comparisons between separate arts in a selected historical period. (Permission.) Mr. Kurtzman, Mr. Andres

AMERICAN LITERATURE

The major in American Literature is expected to develop an understanding of the major figures and the chief literary movements as manifested in the writings of both major and secondary figures. The interplay between the general culture and literature and the relationship of writers to one another are emphasized.

Required for the major: AL 201 and 202; AL 301 and 302; four other term courses in the Department; the Senior Program. Each major is required to take at least two courses in American history and two term courses in a non-American literature, the courses to be determined in consultation with his Faculty Adviser.

The Senior Program consists in a Fall Term seminar and a program of Independent Study in the Spring Term, culminating in a General Examination. Independent Study is based on a background reading list and informal group discussions.

Honors Program: Departmental honors are awarded on the basis of a Senior Thesis. To qualify as a candidate for honors one must have had an average of B- or over for his previous work in the Department. In consultation with his Faculty Adviser and with the approval of the Department, he will select a topic for independent investigation in the Spring of his Junior year. In the Senior year he will take AL 700 (Senior Research) in the Fall Term and in either the Winter or the Spring Term.

An oral examination will be given on the thesis. The examination will be given by two members of the Department and one person from outside the Department. Highest Honors will be granted for a grade of A or above, High Honors for a grade of B+ or A-, Honors for a grade of B. For Honors in any of these categories he must also have a final average of B- for all work in the Department and a mark of B on the General Examination.

AL 201 American Literature — Fall, Spring
A study in the growth of American literature from the seventeenth century through the first half of the nineteenth century, as emerging from its cultural backgrounds, and the significance of its major writers: Edwards, Franklin, Cooper, Irving, Poe, Hawthorne, Emerson, Thoreau, and others. — Staff

AL 202 American Literature — Fall, Spring
A study of the major writers from the second half of the nineteenth century to the present, with emphasis on particular works and their relevance to the more important traditions in American literary history. (AL 201.) — Staff

AL 302 The American Novel — Spring
An analysis of thematic and structural aspects in representative American novels of the twentieth century with concentration on Cather, Dos Passos, Fitzgerald, Hemingway, Faulkner, Wright, Ellison, Malamud, and Bellow. (AL 301.) — Mr. Conron

AL 401 The American Short Story — Spring
A study of the development of short prose fiction in America from Washington Irving to the present time. The history of the short story form, techniques, and changing point of view will be considered with special regard to Hawthorne, Melville, James, Crane, Fitzgerald, Hemingway, and others. (AL 202 or permission.) — Mr. Beck

(AL 402 Emerson, Melville, Whitman) To be offered in 1972-73.

AL 404 Modern American Poetry — Spring

A survey of twentieth century American poetry centering on the major figures. In a given year approximately six of the following poets will be studied carefully with others being touched upon: Robinson, Frost, Stevens, Williams, Pound, Eliot, Ransom, Cummings, Roethke, Lowell.

Mr. Stitt

(AL 407 American Biography) To be offered in 1972-73.

(AL 410 Seminar: Studies in Contemporary American Poetry) To be offered in 1972-73.

AL 500 Special Research — Fall and Spring

Open to qualified majors. (Permission.) — Staff

AL 700 Senior Research — Fall, Winter, Spring

For Senior majors who are candidates for Departmental Honors. — Staff

AL 705 Independent Study — Spring

Group discussion based on a reading list of historical and critical studies. The discussions and readings are designed to prepare the student for the General Examination, in which he will be expected to make informed statements about literary relationships and the interplay of literature and the general culture. (Senior Majors.)

THE PROGRAM IN AMERICAN STUDIES

This program offers students an opportunity to work in related aspects of American culture in various departments and in Junior and Senior seminars which integrate the student's course of study.

1. AL 201, 202 (or for qualified students other courses approved by the Department).
2. HI 203, 204 (or for qualified students other courses approved by the Department).
3. Three additional courses will be required in AL and HI, with at least one i each department.
4. Four courses in departments other than AL and HI such as Economics, Political Science, Religion, Sociology or, until other courses are offered, independent work in American Philosophy or Art.
5. In the second semester of the Junior year a seminar, with one faculty member responsible for organization and with the participation of other faculty when their particular interest would contribute to the subject.
6. A seminar and thesis in the senior year.

This is a total course requirement of 14. The student will be designated as a major in History-American Studies or American Literature-American Studies.

AS 400 Seminar In American Studies — Spring

Brief consideration of the nature and problems of American Studies, followed by investigation of selected aspects of Black experience in America, including history, literature, art, politics, law, sociology and religion. (Enrollment limited.) — Staff and visiting lecturers

AS 704 Senior Seminar - Thesis — Spring

In weekly meetings, students who have taken AS 700 will report on the results of their research for criticism and discussion, and assign common readings for the group. The thesis will be submitted at the end of the year, not later than April 15.

Faculty Advisers: Mr. Catton, Mr. Ferm, Mr. Nelson, Mr. Stitt

ART

Required for the major: In the belief that experience in both the practice and history of art constitutes the most rewarding program, the Department requires both AR 101, Introduction to the Visual Arts (or AR 102, Twentieth Century Painting and Sculpture), and AR 103-104, Introduction to Design, of its beginning students. Completion of these courses with a grade of C or better qualifies a student for the major.

Students may complete their requirements in either of two ways:

Alternative A: six additional courses in the history of art, plus senior work.

Alternative B: four additional studio courses, and four additional courses in the history of art (two of which shall have as their subject art before 1800), plus senior work.

Senior work:

Alternative A: Students elect two terms of AR 700, normally Fall and Winter, and write a senior thesis.

or

Students elect two terms of AR 700 in areas in which they have already done course work, and write two senior essays.

Alternative B: Students elect at least two studio courses beyond the six required for the major.

or

With permission of the Department, students elect AR 700 in each of the three terms, and carry out a sustained studio project in one medium.

Honors: are awarded to students who do outstanding work in studio or art history. Normally a senior thesis or a portfolio produced during senior year must be presented by candidates for honors.

AR 102 Twentieth Century Painting and Sculpture Spring
A consideration of selected problems--aesthetic, perceptual, critical--in an attempt to establish the uniqueness of our own century's artistic expression. Beginning with the pictorial revolution of Impressionism and its aftermath, various movements will be considered in depth: Symbolism, Expressionism, and Abstraction; Cubism and Surrealism; Abstract Expressionism, and the numerous aspects of art of the 1960's. Two lectures, one discussion. Open to Freshmen and Sophomores only. (Not open to students who have taken AR 202.) Mr. Hunisak

AR 104 Introduction to Design Spring
Design in the arts with special emphasis of sculptural and architectural problems. (AR 103) Limited to 30 students. Mr. Bumbeck, Mr. Muirhead

AR 201 Art of the Italian Renaissance Spring
A selective survey of Italian art and architecture from 1250 to 1600, with an emphasis upon leading masters seen in their artistic, intellectual, and religious context. Mr. Turner

(AR 204 The Art of China and Japan) To be offered in 1972-73.

AR 206 Figure Drawing Spring
A continuation of AR 205, open to those who have not had AR 205 only by permission.
Mr. Bumbeck, Mr. Muirhead

(AR 301 Modern Architecture) To be offered in 1972-73.

AR 302 Baroque Art in Europe Spring
During a given year a major aspect of European art between 1600 and 1750 will be considered. In 1971-72 the subject will be the art and architecture of the Italian Baroque. Mr. Hunisak

AR 305 Art of the Nineteenth Century Spring
A stylistic analysis of European painting and sculpture and a study of its development from the Rococo period through Impressionism. The art of such artists as Watteau, Goya, David, Delacroix, Friedrich, Constable, Courbet, Manet, the Pre-Raphaelites, the French Academicians, the Macchiaioli, as well as such sculptors as Rodin, Rude, Medardo Rosso, and many others will be considered. Mr. Reiff

AR 310 Painting Spring
A continuation of AR 309. Emphasis will be placed on the possibility and capacity of one medium, oil paint, to give substance to the student's sensory images of sight and touch. Limited to 30 students. (AR 103, AR 104, AR 309 or permission.) Mr. Muirhead

AR 316 Printmaking Spring
A continuation of AR 315. Limited to 20 students. (AR 103, AR 104 or permission.)
Mr. Bumbeck

AR 401 Seminar in Modern Art Spring
A major sequence or issue in nineteenth and twentieth century art will be considered in a given year. In 1971-72 the subject will be trends and problems in American art since 1945.
Mr. Reiff

AR 500 Advanced Studies in the Visual Arts
Supervised independent work in art history or studio. Staff

AR 700 Senior Independent Study Staff

See also INTERDEPARTMENTAL ID 300

BIOLOGY

The Department of Biology offers programs of study in a broad spectrum of areas, ranging from life processes at the molecular level to the interrelationships of whole organisms and their environments. The Major Program is designed to enable the liberal arts student to understand the biological world and man's role in it, as well as to prepare students for graduate and professional schools. The Department is well equipped to offer laboratory study and student research opportunities in many areas. In addition, the geographical location of Middlebury College, with thousands of acres nearby owned by the College or within the Green Mountain National Forest, provides an excellent outdoor laboratory for ecological studies.

Each student electing a Biology major plans his program of courses in close consultation with a faculty adviser within the Department. This program will include BI 110, other Biology courses to bring the total within the Department to at least 10, and at least 3 cognate courses chosen from the offerings of the departments of Chemistry, Physics and Mathematics. This procedure is intended to allow the student maximum flexibility in designing a major program which fits his individual interests while providing him the guidance needed to avoid mistakes which might hamper his future career.

A separate, joint major with Chemistry has been developed to enable students to study aspects of both fields without having to take all the courses prescribed for a pure major in either

field. The Department also participates in the interdisciplinary Environmental Studies major. Special major programs involving biology and other fields can be arranged to suit individual needs.

Students planning careers which require graduate or professional school training involving biology should be familiar with the subject matter included in CH 101, CH 241, and CH 242; MA 112; and PH 109, and PH 110, in addition to their biology program. Some medical and graduate schools expect additional courses in mathematics and chemistry. Students who anticipate applying to graduate or professional school programs will be urged by their advisers to include appropriate courses in their programs.

The Department admits a limited number of graduate students as candidates for the Degree of Master of Science in Biology. The requirements of this program include research, a thesis, an oral examination, and some assisting in undergraduate laboratories.

Courses designated with an asterisk* may be taken without laboratory under the following conditions: (1) The stated prerequisites for the course must be met. (2) Students majoring in Biology or jointly in Biology and other subjects may not count such courses toward the fulfillment of the major.

Required for a Major: BI 110; 9 elective courses within the Biology Department; 3 cognates chosen from Chemistry, Mathematics, and Physics. Recommended: see list above, advised as preparation for graduate and professional schools.

Required for a Joint Major in Biology and Chemistry: see Chemistry department.

Honors Program: students should apply during the Spring Term of the Junior year. Honors are awarded on the basis of an Advanced Study (BI 500) project of superior quality and satisfactory completion of requirements to be specified by the Department.

*BI 205 The Developmental Biology of Plants and Animals — Spring
An introduction to animal and plant development, with emphasis on the mechanisms underlying the various developmental phenomena. Laboratory work will include descriptive and experimental approaches to developmental problems. 3 hours lecture, 4 hours laboratory with the first hour devoted to discussion. (BI 110 or permission.) — Mr. Watters

BI 211 Biology of the Vertebrates - Homeostasis — Spring
Continuation of Biology 210. Systems covered will include digestive, circulatory, respiratory, excretory and reproductive. Laboratory work will include microscopic studies and organogenesis in the chick and rat. 3 hours lecture, 4 hours laboratory. (BI 210 or permission.)
Mr. Van Vleck

BI 305 Microbial Ecology — Spring
An introduction to the biology of microorganisms from an ecological point of view, covering the bacteria, viruses, unicellular algae, and fungi. The role of microorganisms in the cycling of materials within the biosphere will be stressed. Other topics to be discussed include microbial genetics as it relates to bacterial adaptation, symbiosis and the ecology of disease, and the applications of microbial ecology in such areas as waste treatment and pollution control. The laboratory will include exercises dealing with the isolation, culture, and identification of microorganisms as well as experiments on microbial interactions in simplified ecosystems. 3 hours lecture, 3 hours laboratory. (BI 110 or 103, CH 101 or permission.) — Mr. Bell

BI 312 General Ecology — Spring
The organism in relation to the biotic environment. The inter- and intra-specific reactions of an organism to other organisms at all levels of social organization. Laboratory exercises in-

clude field trips to study animal behavior and organization using radiotelemetry devices, and controlled laboratory use of radioactive tracers to study food chains. Each student will write a paper, as if for publication, dealing with independent research carried on throughout the semester. 3 hours lecture, 3 hours laboratory. (BI 311 or permission.) Mr. Woodin

*BI 314 Genetics Spring
Lecture topics include the nature and action of hereditary material, statistical analysis, linkage, mutations, chromosome aberrations and polyploidy, and population genetics. Developmental aspects and evolutionary implications are stressed. Laboratory study is designed to introduce some major organisms and techniques used in research, and includes training in analyzing and reporting data. 3 hours lecture, 3 hours laboratory. (BI 110 or 103.) Mr. Saul

*BI 316 Animal Behavior Spring
A review of recent developments in the field of the behavior of invertebrates and vertebrates, with particular emphasis on the evolution and ontogeny of behavioral patterns, and some consideration of the physiological and neurological mechanisms underlying them. The laboratory will include both set experiments and independent investigations, the latter with fish and with local animals. 3 hours lecture, 3 hours laboratory. (BI 110 or 103 or permission.)
Mr. McDonald

(BI 410 Adaptation and Evolution) To be offered in 1972-73.

BI 500 Advanced Study Fall, Winter and Spring
A project involving laboratory research or extensive library study on a topic chosen by the student and a faculty adviser. For majors in Biology. (Permission.) Staff

BI 750 Senior Work (Environmental Studies) Fall, Winter and Spring
Independent Study - Senior Thesis
Independent study, normally involving a laboratory or field research project for any two of the three senior terms. Required of Environmental Studies majors specializing in ecology. Not open to Biology majors. Staff

BI 900 Research and Thesis Fall, Winter and Spring
Required for all candidates for the Master's degree. Staff

CHEMISTRY

The Department of Chemistry believes that the basic program required of all majors provides a firm foundation in fundamental principles on which individual students may build to accommodate a variety of objectives including secondary school teaching, a position in industry or advanced work in graduate or professional school. Although non-majors may take, with the exception of CH 422, any laboratory course in the department without the laboratory, courses constituting a part of a major in chemistry must be taken with laboratory. The Department of Chemistry is accredited by the American Chemical Society and students taking the appropriate electives may be certified by the Society.

Required for a Major: CH 101*, CH 131, CH 211, CH 241, CH 242, CH 351 plus four elective courses within the Department; MA 112, MA 113, PH 109 and PH 110. Two or three units of independent study may be included in the four required chemistry electives. Students with a professional interest in chemistry are encouraged to elect CH 341, CH 352, CH412, CH 431, CH 452, two course credits of independent study, MA 201, MA 202 and GN 101, GN 102 or RU 101, RU 102.

Joint Major in Biology and Chemistry: Required for a major: Biology BI 110, and four electives in Biology; Chemistry: CH 101*, CH 131, CH 211, CH 241, CH 242, CH 351; MA 112, MA 113, PH 109, PH 110 and three additional electives from Biology, Chemistry, Mathematics or Physics.

A deposit fee to cover cost of broken apparatus is charged in each laboratory course, to be paid at the beginning of each term.

CH 101 Fundamentals of Chemistry — Fall and Spring
Fundamental principles of Chemistry. Atomic theory and atomic structure, chemical bonds, stoichiometry, kinetic theory and the states of matter. Problem drill, conferences. Laboratory work deals with the testing of theories by various quantitative methods. Students with adequate secondary school preparation are encouraged to consult the Department for permission to elect Chemistry CH 211, CH 131, or CH 241 in place of this course. Two sections in Fall; one in Spring. 3 hrs. lect., 4 hrs. lab. Breakage fee. Mr. Roberts

CH 107 Same as CH 101 but without the laboratory.

CH 102 Environmental Chemistry — Spring
Principles of general chemistry necessary for an understanding of the chemistry of natural systems. Particular emphasis on the chemistry of sulphur, nitrogen, and carbon cycles and of the heavy metals relative to air, water, and soil pollution. Laboratory experience in environment sampling and analysis. 3 hrs. lecture, 3 hrs. lab. Breakage fee. Mr. Pool

CH 108 Same as CH 102 but without the laboratory.

CH 131 Systematic Inorganic Chemistry — Fall and Spring
A systematic study of the elements and their compounds based on the Periodic Table. The isolation of the elements from their natural sources, and the synthesis of some important types of inorganic compounds. The properties of selected elements and their compounds are discussed in class and/or studied in the laboratory using various analytical methods. (CH 101 or permission.) 3 hrs. lecture, 3 hrs. lab. Breakage fee. Mr. Scaife

CH 137 Same as CH 131 but without the laboratory.

CH 241, CH 242 Organic Chemistry I and II — Fall and Spring
An introduction to the study of the compounds, both aliphatic and aromatic, of carbon. The approach is based on the properties of functional groups with considerable emphasis on electronic theory and reaction mechanisms. Laboratory exercises involving the synthesis of organic compounds, the analysis of various classes of compounds and the identification of unknowns complement the lecture material. (CH 101 or permission; CH 241 must precede CH 242.) 3 hrs. lect., 6 hrs. lab. Breakage fee. Mr. Gleason, Mr. Harnest

CH 247, CH 248 Same as CH 241, CH 242 but without the laboratory.

CH 352 Physical Chemistry II — Spring
A continuation of CH 351. Further applications of thermodynamics to chemistry by use of chemical potential. The phase rule. Electrochemistry. Elements of statistical thermodynamics

*CH 101 is the normal introductory course in Chemistry. However, students may qualify for permission to omit CH 101 and begin their studies in Chemistry with CH 211 or CH 131, or CH 241. Consult the Chairman of the Department.

are applied to ideal gases. Theories of chemical kinetics. (CH 211, 351.) 3 hrs. lecture, 4 hrs. lab. Breakage fee. Mr. Schuh

CH 358 Same as CH 352 but without the laboratory.

CH 412 Advanced Analytical Chemistry Spring
Principles and theory of separations, both qualitative and quantitative, by chemical and physical methods. Instrumental methods of analysis: spectrophotometric, electrometric, and others. (PH 109, CH 211, and 4 additional semester courses in chemistry.) 3 hrs. lecture, 3 hrs. lab. Breakage fee. Mr. Pool

CH 422 Biochemistry Spring
A study of intermediary metabolism and bioenergetics of biological systems; a brief look at genetic storage and transmittance of information. Some of topics studied are: ATP and tricarboxylic acid cycles and biosynthesis of carbohydrates, amino acids, and proteins. Optional laboratory work involves individual projects dealing with various biochemical techniques. (CH 252, CH 351, or permission; Biology: BI 101 is recommended.) 3 hrs. lecture, 3 hrs. lab. optional. Breakage fee. Mr. Schuh

(CH 442 Advanced Organic Chemistry) To be offered in 1972-73.

CH 443 Advanced Organic Chemistry Spring
A study of some of the more important special topics of organic chemistry including advanced synthesis in general with specific treatment of the following: reactions of active methylene compounds; structure determination of complex natural products; peptide synthesis and sequential analysis: introduction to the steroids; selected name reactions and rearrangements. (CH 242.) 3 hrs. lecture. Mr. Gleason

(CH 452 Physical Chemistry III) To be offered in 1972-73.

CH 500 Independent Study Project Fall, Winter, Spring
Individual Study for qualified students. Permission. Breakage fee. Staff

CH 700 Senior Work Fall, Winter, Spring
Senior majors may register for two or three course equivalents. The student plans and carries out a laboratory research project generally related to current faculty research interests. This work is normally culminated by the writing of a senior thesis.

CLASSICS

The principal aims of courses in the Classics are to enable the student to attain a rapid and accurate reading knowledge of Greek or Latin, and then to read broadly while developing critical skill and a sense of the art of language. Greek and Latin literatures are understood to be an embodiment of deep spiritual and artistic concern, and the major literary achievements are studied in this light. Students contemplating a major should talk with the Chairman.

Classics in Translation

CL 272 Greek Tragedy Spring
Extensive reading in Greek drama in English, with intensive study of selected plays. The student is introduced to the criticism of ancient authors with detailed attention to critical methods

and some of their dangers. Historical background is presented as needed, and the student is rigorously introduced to the structural analysis of poetic discourse. Mr. Harris

Latin

CL 202 Roman Drama Spring
A complete comedy of Plautus, a tragedy of Seneca and selected scenes from other latin plays will be read with special emphasis on the formal aspects of Roman stage performances.
Miss Heibges

CL 302 Satirical Writing Spring
Selections from satires of Lucilius, Horace, Juvenal, the epigrams of Martial and Seneca's Apocolocyntosis will serve to illustrate the origins, ingredients and styles of the satirical genre.
Miss Heibges

CL 402 Roman Historiography Spring
The prefaces and representative passages from Caesar, Sallust, Livy and Tacitus will be critically analysed to determine the goals, themes, formats, biases and styles of the major Roman historians.
Miss Heibges

Greek

CL 550 Independent study Fall and Spring
Students will select an author or area not previously studied and work largely on their own, conferring weekly with the staff about problems in language and interpretation as they arise.
Staff

ECONOMICS

The Economics curriculum has been designed with two central thoughts in mind. First, the broad interests and needs of the entire student body for understanding critically important contemporary problems in which economics plays a fundamental role should be attended to. Second, students who choose to major in the area should find a range of courses sufficiently broad and deep to do full justice to their needs both as undergraduates and as potential graduate students.

The Contemporary Economic Problems course introduces students to the discipline. Its roles are to expose the student to the vocabulary and tools of the economist, to provide insights into the methodology of Economics, and to call attention to the usefulness of Economics in the analysis of large and crucial problems. The course is not a Principles course attempting to survey the entire area of the discipline. Economics majors will achieve the deeper comprehension in the theoretical dimensions of the subject needed through the Micro and Macro Theory courses, Economics 250 and 350. Statistics and Accounting are regarded as tool courses for the major, but they also have general usefulness for non-majors. The five courses just mentioned constitute a body of work required of all majors.

The other courses in the Economics curriculum are either designed to be service courses for the entire student body or courses which both broaden and deepen the major's understanding of the subject. Senior Independent Study is not required. The Research Seminar provides a vehicle through which those who wish this type of academic experience may obtain it.

Required for a Major in Economics: EC 150 (or EC 101 and EC 102), EC 210, EC 220, EC 250, and EC 350. In addition, five electives must be chosen including at least one of the follow-

ing: EC 410, EC 440, EC 450, EC 470, or EC 490. Majors should also consult with their Department advisers for appropriate cognate courses.

EC 150 Contemporary Economic Problems — Spring
An introduction to economic problem solving for students seeking to achieve a better understanding of the economic forces governing society.
Mr. Claudon, Mr. Craven, Mr. Wolff

EC 210 Economic Statistics — Spring
A study of the theory and applications of statistical analysis. (This course is strongly recommended for all students antiicipating graduate study in economics and business.) Mr. Waters

EC 220 Principles of Accounting — Spring
Accounting procedures for proprietorships and corporations with maximum emphasis on theoretical considerations involved. (This course is strongly recommended for all students anticipating graduate study in law or business.) Mr. Smith

EC 260 Consumer Economics — Spring
A critical examination of "consumer sovereignty" in the American economy. (EC 150 or EC 101 or EC 102) Mr. Craven

EC 280 Labor Economics — Spring
Economics of manpower and the labor market; the role of unions; labor legislation. (EC 150 or EC 101 or EC 102) Mr. Craven

EC 320 The Economics of Corporate Behavior — Spring
An examination of the behavior of the corporation in theory and in practice. (EC 150 or EC 101 or EC 102 and EC 220) Mr. Smith

EC 330 The Economics of Development — Spring
An analysis of history, theory, and competing contemporary policies for economic development. (EC 150 or EC 101 or EC 102) Mr. Wolff

EC 350 Macroeconomic Theory — Spring
An analysis of the determinants of national income, employment, and prices including the contributions of both the Classical and Keynesian theories. (EC 150 or EC 102) Miss Schneider

EC 360 Urban Economics — Spring
The course will consider such topics as location of economic activity; size distribution of cities, models of urban areas; trends in U. S. urban structure; urban transportation, housing, and finance; metropolitan governments. Miss Schneider

EC 410 Econometrics and Introduction to Forecasting Methods — Spring
A study of economic problems utilizing mathematics, economy theory, and statistics to determine the parameters that explain economic behavior. (EC 211, and EC 250 or EC 350 or permission)
Mr. Waters

EC 440 The Economics of International Trade — Spring
A study of the economic basis of trade among nations, its composition, and impact on domestic economies. (EC 250) Mr. Claudon

EC 490 Research Seminar — Spring

Individual research topics selected. Problems of research methodology common to the group studied and discussed. Bibliography and detailed outline developed under close supervision.

Staff

EC 500 Individual Special Projects — Spring

(Permission) — Staff

ENGLISH AND DRAMA

Because of the varied nature of the Department's offerings, courses are differentiated by their second and third digits in the following manner:

Literature (00-19)	Theatre Arts (40-59)
Dramatic Literature (20-39)	Writing (60-79)

In registration the symbol ED is used to designate all courses offered by the Department. For example, the first semester of the required freshman course is designated: ED 101.

The Department offers majors in English Literature and in Drama.

Required for a Major in English are (1) Interpretation of Literature (ED 101) or Advanced Placement; (2) Interpretation of Literature: an Historical Approach (ED 201-202) or the Qualifying Examination. (Students may qualify for the English Major either by their standing in ED 201-202 or by the Qualifying Examination); (3) Distribution Courses: five courses in literature, one chosen from each of the following groups: A. ED 227, 307, 308, 404; B. ED 224, 303, 304, 321; C. ED 206, 305, 306; D. ED 207, 235, 313, 314; E. ED 208, 325, 326, 402, AL 302, AL 404; (4) the Senior Program.

The Qualifying Examination will test the student's ability to interpret literature critically and will examine his grasp and comprehension of a literary subject in an historical context. The Qualifying Examination will be offered twice: once during the regular examination period at the end of the second semester, when it will incorporate the final examination in ED 202, and again in September on the Friday morning before College begins. Any student, with the Department's permission, may take the Qualifying Examination whether he has been enrolled in ED 201-202 or not; a student who does not qualify during the second-semester examination period may take the Qualifying Examination again in September, although his grade in ED 202 will not be affected.

The Senior Program in English includes a Senior Essay or Honors Thesis and the General Examination. The Senior Essay is a one-term project; the Honors Thesis is a two-term project. Majors who have taken a writing course and an independent study project in writing may petition to do a creative writing project as their Senior Essay or Honors Thesis. Each Senior is assigned to a faculty member for guidance in his essay or honors thesis. The General Examination receives one course-credit. The examination will be based on the ED 201-202 reading list of the Senior's sophomore year and on the reading list of the Distribution Courses. Each Senior is expected to review and reconsider the material of the ED 201-202 reading list of his sophomore year and of the reading list of the five Distribution Courses of his choice. Departmental honors will be awarded on the basis of the Honors Thesis or on the basis of grades in the General Examination and the Senior Essay.

Required for a Major in Drama are (1) ED 101 or Advanced Placement; (2) ED 201-202 or the Qualifying Examination; (3) ED 141-142 and its examination as the qualifying program for the drama major; (4) Distribution Courses: four courses in dramatic literature including Greek and Roman, Shakespeare, Nineteenth Century, and Modern; (5) Two additional courses in the 40-series (theatre arts); (6) Participation in three production seminars, not necessarily for credit; (7) The Senior Program. Students choosing the drama major should select their advisers from among the drama staff prior to registering for sophomore year.

The Senior Program in Drama includes a Senior Project or Honors Project and the General Examination. (See details under English Major.) Each senior is expected to review and reconsider the material of the ED 201-202 reading list of his sophomore year; the reading lists of his Distribution Courses; the reading list of ED 141-142; and his work in other theatre arts courses. Honors will be awarded as for the English Major.

Recommended : Courses in the other arts (e.g., AR 101, 103, 104; MU 101); History (e.g., HI 103, 104, 319, 320); and Psychology (e.g., PY 229).

Literature

ED 101 Interpretation of Literature — Spring
Close critical reading of the lyric and prose fiction. Frequent short critical papers. (Required of freshmen and a prerequisite for other courses offered by the Department.) Staff

ED 102 Special Topics in Literary Interpretation — Spring
Close reading, discussion, frequent papers on selected authors, genres, or topics.
Staff

ED 202 From Swift to Joyce — Spring
A consideration, from divergent viewpoints, of some major works of literature including Swift's Gulliver's Travels, selected poems by Blake and Keats, Thoreau's Walden, Tennyson's In Memoriam, Conrad's Heart of Darkness, and Joyce's Ulysses. Lectures, discussion, papers, independent study, and final examination comprise methods and requirements of the course.
Mr. Price & Staff

ED 208 The Twentieth Century English Novel — Spring
A study of major achievements in an art form which has directly influenced the shape of contemporary consciousness. Novels by Joseph Conrad, D. H. Lawrence, E. M. Forster, Virginia Woolf, James Joyce, and others will be considered through lectures, discussion, papers and examinations. Mr. Price

(ED 224 English Drama to 1642) To be offered in 1972-73.

(ED 235 19th Century Drama) To be offered in 1972-73.

ED 303 Introduction to Literature of the English and Continental Renaissance: 1500-1610 — Spring
Selected works of major English and Continental writers, in conjunction with readings in the historical and cultural background of the period. The course will include such figures as Erasmus, Rabelais, Montaigne, Wyatt, More, Sidney, Spenser, and Shakespeare. Non-English works will be read in Renaissance translations where possible. Juniors and seniors.
Mrs. Peters

(ED 304 Poetry and Prose of the Age of Milton) To be offered in 1972-73.

ED 305 Poetry and Prose of the Augustan Age
A study of three major artists of the period--Dryden, Swift, Pope--who are approached through the works of lesser contemporaries (e.g., Pepys, Rochester, Defoe, Addison and Steele, Hervey, Gay) and assessed through an examination of representative major works. Mr. Littlefield

ED 314 Prose and Poetry of the Victorian Period — Spring
A study of Tennyson, Browning and Arnold, and their responses to their time. Other writers

receiving some attention are Macaulay, Carlyle, Mill, Newman, Huxley, Pater, Swinburne, and Wilde. Sophomores by permission. Mr. Cabot

ED 323 Shakespeare Spring
A seminar in Shakespearean tragedy. Juniors and seniors. Permission. Mr. Cubeta

ED 327 American Drama Spring
A study from Metamora to No Place to Be Somebody, focusing on America's commercial, eclectic heritage with emphasis on recent attempts to discover a special American idiom. Enrollment limited to 54. Two lectures and one discussion period each week. Mr. Volkert

ED 402 Modern British Poetry Spring
Through careful analysis of the style and thought of representative poems, this course will attempt to suggest ways of savouring the works of the following poets: Hardy, Hopkins, Yeats, Auden, Thomas. The theme of the making or the choosing of the Self (Yeats: "Myself I must remake") will be emphasized. Open to Sophomores, Juniors and Seniors. In alternate years Mr. Pack will offer Modern American Poetry (AL 404). Mr. Pack

Seminars

Seminars vary in topic from year to year. A group of students interested in exploring a certain body of material may initiate a seminar by consulting with members of the department. Such requests should be made by the third week of the semester preceding that in which the seminar is to be offered. These seminars with maximum enrollment of fifteen will be open on a permission basis to juniors and seniors regardless of departmental major.

ED 323 Seminar: Shakespeare
For description see Literature Courses.

ED 407 Seminar: Byron and Shelley Spring
Selected poems, dramas and prose by each writer will be examined for aspects of style, uses of myth and legend, influence of gothic literature, and their combined attempts to create, while in exile, a world of heroic possibility. Mr. Cabot

ED 408 Seminar: Milton Spring
A study of the major poetry and selected prose of Milton. Particular attention will be given to an examination of how the poet expressed the major social, religious, and political concerns of his time within traditional forms. Mr. Littlefield

ED 409 Seminar: William Butler Yeats Spring
Extensive reading in most of Yeats' works with intensive study of selected poetry. Works to be read or read in outside the required reading of all the poetry will include: The Autobiography, The Collected Plays, A Vision, Mythologies, Irish Fairy and Folk Tales (ed. Yeats), Ideas of Good and Evil, Discoveries, Per Amica Silentia Lunae, The Cutting of an Agate. Mr. Hill

Writing

ED 175 Imaginative Writing: Poetry Spring
Each student will write at least one poem a week, exploring a variety of poetic forms. The class will examine closely and critically poems written by students and published poets, when possible tracing the development of published poems through drafts. Open in the spring to freshmen who have completed ED 101. Permission. Miss Barker

ED 276 Imaginative Writing: Prose Spring
A seminar in advanced writing, in which students are encouraged to undertake writing projects, with advice and editorial assistance from the instructor, in order to discover where their talents may lie and to broaden their sense of technique and style. The course is designed for students primarily interested in prose, though some poetry will be welcomed. The students may choose to write stories, novelettes, novels, plays or nonfiction. Limited enrollment by permission.
Mr. Clagett

ED 279 Techniques of Research Spring
This course is designed to train students in the art of research for material to be used in various kinds of advanced writing, including biography, nonfiction, fiction, and scholarly writing. The choice of the topic is open to the student. Limited enrollment by permission. Mr. Clagett

Advanced writing: Students may undertake advanced writing at the 500 or 700 levels. Candidates are asked to submit a description of their project and samples of their writing to a departmental committee two weeks before registration.

Theatre

ED 142 Forms and Styles of the Theatre: An Historical Approach Spring
An historical view of the essentially collaborative art of the Theatre which will take into account specific contributions of playwright, director, designer and entrepreneur to major theatrical events of the Nineteenth and Twentieth Centuries. Staff

(ED 224 English Drama to 1642) To be offered in 1972-73.

(ED 235 19th Century Drama) To be offered in 1972-73.

(ED 249 Style: Design (Stage and Scene)) To be offered in 1972-73.

(ED 250 Continuation of ED 251) To be offered in 1972-73.

ED 251 Style: Design (Costume) Spring
The relationships of contemporary costume planning and design to: the play, period dress, design principles and the other visual production elements. Some previous experience in drawing is helpful. ED 249, ED 250 or permission. Offered in alternate years. Mr. Potter

ED 323 Shakespeare Spring
For description, see Literature Courses. Mr. Cubeta

(ED 325 Modern Drama: 1870-1920) To be offered in 1972-73.

ED 327 American Drama Spring
For description, see Literature Courses. Mr. Volkert

ED 346 Style: Acting and Directing Spring
A seminar in which a Greek tragedy, a Shakespearean tragedy, a Comedy by Moliere, and a Shakespearean Comedy will be studied in relation to acting and directing problems. Discussions, workshops and projects. Permission. Mr. Volkert

Production Seminar:
The Department offers a production seminar in conjuction with each major production. Students enrolled in these seminars take part in a two or three week period of intensive study of the

play and then participate in the production of the play. Each student, with the approval of the department, defines the nature of his participation: actor, stage manager, critic, literary historian, or designer, etc. Participation may vary from playing a major role to writing an extended critical essay about the playwright. Open to freshmen and upperclassmen. Permission. The Spring production will be Women, Beware Women.

ED 443 Acting and Directing — Spring, Mr. Teush

ED 444 Acting and Directing — Spring, Staff

Cinema

See FRENCH FR 350 French Cinema

Special Projects

The Department will consider applications from qualified students who wish to undertake special projects in literature, dramatic literature, writing, directing, theatre arts, or film. A student proposing to undertake such a project should submit a detailed proposal to his adviser two weeks prior to registration.

ED 500, 520, 540, 560 Special Projects — Fall or Spring

Senior Program

Students majoring in the Department are required to undertake a one or two-term senior project. A student hoping to undertake a two-term honors project should normally submit an application in writing to his adviser at least two weeks prior to registration for the term during which he intends to begin his project. Intentions for one-term projects should be submitted in writing for approval no later than the end of the second week of the term in which they are to be undertaken.

ED 700, 740, 760 Senior Projects — Fall, Winter and Spring

ED 705 General Examination — Spring
Required of all majors. (See description of a major.)

FRENCH

The French Department hopes to develop students' interest and competence in speaking and writing French, ability to read and criticize literature in French, and familiarity with the major themes and perspectives of the French-speaking world.

We consider command of the French language to be the essential ingredient and prerequisite to serious and successful pursuit of such aims. On the other hand, we recognize that an individual student may choose to pursue other interrelated areas, and that a successful major in French will benefit from work in related areas of intellectual activity, such as other languages and literatures, fine arts, history, philosophy, sociology, etc. Accordingly, requirements for the major are designed to develop a student's ability to read and discuss relatively complex literary and social documents in French and thereafter to leave him sufficient freedom to pursue his own particular bent, in consultation with his adviser.

Required for the major: FR 205-206 or its equivalent; four courses at the 300 level or above. Total of not less than 10 courses, not more than 14.

Language

FR 102 Beginning French — Spring
Oral inductive approach combined with more emphasis on the reading and writing aspects of the language. Students are asked to participate more actively. Language Laboratory still intensively used. Three class meetings and two drill sections per week. Mr. Barenbaum

(FR 109 Intermediate French) To be offered in 1972-73.

(FR 110 Intermediate French) To be offered in 1972-73.

FR 202 Syntax, Reading, Oral Practice and Writing — Spring
Reading and discussion of modern literature and a few articles from current French periodicals. Review of grammar according to the class's needs. Students will write a few compositions. (For students with 3 or 4 years of average preparation in the language.) Mr. Barenbaum & Staff

FR 205 Advanced Oral and Written Expression — Spring
A course designed to increase and perfect the student's ability to express himself in spoken and written French. Emphasis will be placed on diction, clarity, variety and the expression of abstractions. Section limited to 15 students. Staff

FR 206 Advanced Oral & Written Expression — Spring
Continuation of French 205 - Greater emphasis on use of the language, via discussion of articles in L'Express, to which students will subscribe. Also readings and discussion of the play to be staged in the French production seminar. (FR 205 or permission) Staff

Literature

FR 210 Introduction to Critical Reading — Spring
Study of the elements and structures of the literary work, from a generic rather than an historical viewpoint: prose narrative forms. The student will develop and demonstrate his ability to criticize literature in class discussions and papers. Mr. Thiher & Staff

FR 211 Creative Writing in French — Spring
Primarily for the advanced language student with creative ability. An introduction to the practice of writing poetry narrative, and other forms. Seminar, oral and written reports, final project. All those intending to take the course should see the instructor. Prerequisite: FR 205 (permission). Mr. Freedman

(FR 311 Moliere, Marivaux and Beaumarchais) To be offered in 1972-73.

(FR 315 The Bildungsroman in Nineteenth Century French Literature) To be offered in 1972-73.

(FR 318 Modern French Poetry) To be offered in 1972-73.

FR 320 The Contemporary French Novel — Spring
Study of contemporary novels (Butor, Robbe-Grillet, Sarraute, etc.) with emphasis of the problems of ecriture and the search for a new literary language that these novels pose.
Miss Carayon

FR 334 Medieval French Poetry Spring

Readings in the various types of French poetry, from 1000 to 1400: the Chanson de Geste, Lais, Roman Courtois, Fabliaux, and forms of love, religious and satiric poetry. The first three weeks will be devoted to an intensive study of old French to enable students to read the texts in their original language.

Readings: Chanson de Roland, Lais de Marie de France, Chretien de Troye's Tristan et Iseult, La vie de Saint Alexis, Guillaume de Machaut, Eustache Deschamps, etc... Mr. Bernauer

FR 350 French Cinema Spring

An introduction to French Cinema through viewing selected films of great directors. Directors include the Lumière Brothers, Méliès, Renoir, Clair, Vigo, Bresson, Truffaut, Resnais, Godard, etc. In addition, there will be selected critical readings pertaining to both specific films and to the language of cinema. The course format calls for the student to see the film twice on one day, to be followed by a discussion section. There will be two discussion sections, one in French and one in English. Students knowing no or little French are encouraged to sign up for the English section. All films will have subtitles, and readings will be selected on the basis of language. Mr. Freedman, Mr. Thiher

(FR 411 French Civilization) To be offered in 1972-73.

FR 442 Workshop in French Theater Spring

Group study of a play in French, concentration on the play itself, the problems of production, and the presentation of the play to various audiences (high school, other colleges, Middlebury). Students will participate as actors and technicians and will have an active "teaching" role to play as they explain the play and the production to their audiences. Moliere: Tartuffe. Seminar open to 15 students by permission. Mr. Barenbaum

FR 500 Independent Projects Spring

Qualified undergraduates may be permitted to undertake a special project in reading and research under the direction of some member of the department. Staff

FR 700 Senior Research Spring

Staff

GEOGRAPHY AND GEOLOGY

Geography

Geography is concerned with the "where" and "why" of human activities. In its attempt to explain the differences which exist from place to place over the earth's surface, it collects, analyzes, and integrates data from both the physical and social sciences. It examines such physical elements as landforms, climate, soils, and vegetation and interprets them in terms of the distribution of people, their ways of making a living, and the social and political patterns they have developed. Because the interaction of man and his environment is constantly changing, geography seeks to understand how present world patterns have evolved from the past and how they might be modified further in the future.

The Department also participates in the interdisciplinary major, Environmental Studies.

Required for a Major: GG 101, GG 102, GG 201, GG 202, GG 301, GG 401, and one regional course numbered from GG 311 through GG 316; Independent Study (GG 700) and the Senior Seminar (GG 704). The Fall and Winter Terms of the Senior Program are devoted to the writing of a thesis based on independent field research and the Spring Term is devoted to a seminar in contemporary problems.

Cognate courses for a Major in Geography range over a broad field and should be selected from other departments according to one's interest in Geography, and with the approval of the adviser. Students contemplating graduate studies and/or professional careers in city and regional planning may also avail themselves of Independent Projects in Geography (GG 500) designed to meet their special needs.

GG 102 Introduction to Spatial Analysis II: The Underdeveloped World — Spring
A survey of the physical and cultural factors which influence the distribution of man and his activities on the surface of the earth. Skills developed in GG 101 are applied in the analysis of the countries and regions of Asia, Africa, and Latin America. (GG 101 is a pre-requisite for GG 102.) — Mr. Illick

GG 202 Spatial Analysis of Economic Activity
An examination of the origins, nature, and distribution of man's economic activities over the world. The evolution of subsistence, commercial, and planned economies will be studied in a spatial context. Field trips. (GG 101) — Mr. Malmström

GG 211 The Environment of Man: The Urban Setting — Spring
An analysis of the spatial distribution of urban settlements, their relationships with each other and with their rural hinterlands, and their internal differentiation. A study will be made of the growth and decline of urban settlements and of areas within urban settlements. The nature and problems of urban places in different parts of the world will be examined. (GG 101 or permission) — Mr. Hovinen

GG 302 Techniques of Spatial Analysis: Remote Sensing and Cartography — Spring
An introduction to the history, compilation, design, and construction of maps. Training will be given in the techniques of preparing maps from field surveys, air photographs, library, and statistical and computer data. Particular attention will be given to the interpretation of images produced by radar, sonar, infrared and other sensors. Field sketch and overlay maps as well as three-dimensional diagrams and models will be produced. 3 hrs. lect., 3 hrs. lab. (GG 101) Limited to 20 students. — Mr. Illick

(GG 311 Geography of Anglo-America) To be offered in 1972-73.

GG 313 Spatial Analysis of Europe — Spring
A study of the economic, social, and political patterns of present-day Europe. Emphasis will be placed on the distinctive personalities of the individual countries and on their role in regional and global affairs. (GG 101) — Mr. Malmström

GG 412 Applied Spatial Analysis: Principles of Planning — Spring
An examination of the nature of the planning process. A study will be made of land-use planning at various levels (interstate, state, regions within states, and local). The planning system in the United States will be compared to that in Sweden. Students will have an opportunity to apply planning techniques to problems in Vermont. (GG 101 and GG 201, or permission) — Mr. Hovinen

GG 500 Independent Projects in Geography — Fall and Spring
A course arranged to fulfill the research needs of students majoring in Geography. — Staff

GG 704 Senior Seminar — Spring — Staff

Geology

Students can enter the program in geological sciences through any of four different courses: Global Tectonics, Elements of Oceanography, Geochemistry of Earth Materials, or Environmental Geology. They then may concentrate in these or other areas depending on where their interests develop. Interdisciplinary concentration is encouraged. Work in the Geological Sciences culminates in a 3 unit senior thesis that consists of an original contribution based on student field and/or laboratory work.

Required for the major: No courses are required of any student entering the program. Concentration in any of several areas such as geophysics, oceanography, geochemistry or environmental geology will include at least 12 course credits, but not more than 20. Students are expected to take in addition one year of college mathematics, physics, and chemistry or their equivalents. Advanced courses in these and selected other fields may be counted toward the required minimum 12 course credits. All Area Concentrations will include a three course unit senior thesis.

GG 252 Global Tectonics — Spring
Sea-floor spreading and continental drift, origin and evolution of mountain systems, and concepts of plate tectonics viewed in light of recent advances in the geology and geophysics of ocean basins and continents. Laboratory: Regional tectonic synthesis, field problems in Vermont geology. 3 hours lecture, 4 hours lab. Mr. Coney

GG 352 Environmental Geology — Spring
The geological environment viewed in terms of its relationship to the ecology of man. Principles of geomorphology and hydrology, use and misuse of natural resources, problems of prediction and control of natural disasters will be evaluated to offer solutions to such contemporary problems as erosion, waterway control, pollution and regional planning. Laboratory: field and laboratory examination of environmental problems. 3 hours lecture, 4 hours lab.
Mr. Baldwin

(GG 292 Analytical Petrology) To be offered in 1972-73.

GG 372 Evolution of Ocean Basins — Spring
Synthesis of processes which determine the physiography, sedimentation, and tectonic development of the sea-floor; concentration involving oral and written presentations on critical problem areas such as continental margins, trenches, and mid-ocean ridges. (GG 251, 261 or 262, MA 112, 113; PH 103, 104; CH 101; or permission.) 3 hours lecture, 5 hours laboratory, field problems. Mr. Folger

GG 382 Advanced Tectonics and Geophysics — Spring
Principles of tectonic analysis and regionalization; discussion of regional tectonic processes in space and time; methods and results of geophysics and the bearing of these results on crustal tectonic evolution. Laboratory; compilation and interpretation of regional tectonic maps; geophysical investigation of field problems. (Advanced work in geological science, mathematics or physics.) 1 hour lecture, 6 hours lab. Mr. Coney

GG 550 Readings and Research — Spring
Individual or group independent study, laboratory or field research projects, readings and discussion on timely topics in earth and environmental science. Staff

GG 750 Senior Research Spring

A three unit senior program dedicated to original research in geological science resulting in a written thesis which must be orally defended.

GERMAN

Departmental students are normally expected to take the eight courses which presently constitute the Major in German Literature. Since all higher courses will be conducted in German, completion of German 202 or its equivalent is prerequisite to acceptance into the Department. In their junior and senior years qualified students may undertake approved independent research. It is the department's expectation that all majors will have had at least one semester in a German speaking country by the time they graduate. Junior majors will normally spend the second semester at the Johannes Gutenberg-Universität in Mainz. There is no comprehensive examination in the senior year.

GN 102 Elementary German Spring

The course consists of three lectures, three drills and laboratory. Lectures. The lectures predrill the student, which is to say, the student is guided through the exercises that he is to prepare for the following day's drill. Drills. Drilling is done in groups of approximately ten students. Since they have been through the exercises in lecture, students are expected to display absolute and automatic control of drill assignments.

Mr. Huber, Mr. Vail & Staff

GN 202 Advanced German Spring

The course meets three times a week in sections of approximately ten students. Modern German texts will be read and interpreted, and the student will be introduced to the methods of literary analysis. The course will further increase the student's fluency in spoken German and his facility in reading. Staff

GN 301 Modern German Literature Spring

The course will examine the development of German literature since Naturalism, focusing on works by Hauptmann, Mann, Hofmannsthal, Kafka, Brecht and others. Considerable attention will also be devoted to representative post-war writers. Mr. Huber

(GN 305 The German Novelle) To be offered in 1972-73.

GN 307 The German Novelle Spring

This course will follow one genre, the Novelle, as it evolves through a century and a half of German writing. The aim of the course is to acquaint the student not only with the development of a form, but with the companion development of the critical concepts which serve it. Readings will range from Goethe to Kafka. Mr. Vail

(GN 310 German Lyric Poetry) To be offered in 1972-73.

(GN 406 Romanticism) To be offered in 1972-73.

GN 500 Independent Study

HISTORY

The History major combines an introduction to several areas of historical knowledge with intensive training and practical work in historical research. Majors must take at least one

semester lecture-course in early history, choosing from the following: HI 103, 205, 207, 311, 312, or 313; and must also take at least two semester-courses outside their field of concentration. (The fields are defined as Europe, America, and Non-Western.) The same course may be counted towards the fulfilment of both these requirements. They must also take a pro-seminar (HI 401-20) and a Literature of History course (HI 424 or 425) by the end of their junior year. Senior majors, having chosen a topic the previous spring, take Independent Study, as described below under HI 700, and may, if they wish, enroll for the senior seminar in spring. With departmental permission, certain cognate courses (normally not exceeding two) may be counted for credit towards a major in History.

Required for all History majors: eight courses below the 700 level, including a pro-seminar and HI 424 or 425, and a senior project.

HI 104 Modern Revolutions Spring
A comparative study of revolutions, radical mass movements, and revolutionaries in modern history. The course explores the problems of trying to conceptualize revolution and, through a study of the great revolutions of modern times, points toward the possibility of establishing some comprehensive generalizations about revolution. (Primarily for freshmen and sophomores: juniors and seniors admitted by permission only.) Miss Lamberti & Staff

HI 204 American History, 1877 to the Present Spring
Continues the approach of HI 203. The course emphasizes the responses to the crisis of industrialization, the changing relationship between government and the economy, social and intellectual developments and the emergence of the United States as a major world power.
Mr. Catton & Staff

HI 206 Modern Africa Spring
Drawing from HI 205, the course will study Africans' reactions to the imposition of colonial rule, the formation of new status groups, and political or economical organizations, post-independence developments, and the current struggle against Portuguese and South African regimes.
Miss Strobel

HI 208 Modern East Asian History Spring
An examination of the role of China and Japan in the modern Asian revolution. The course will deal with the challenge posed by western expansion, economic and cultural, the ways in which China and Japan have striven to maintain their independence of the west, and the role played by tradition both in helping and hindering this effort. Mr. Clifford

HI 302 American Economic History Spring
A review of American economic activity from colonial times to the present. Emphasis is upon the relationships and interactions between economic development and social and political history. European background and influences are also stressed. (HI 203-4 or permission.) Two lectures, one preceptorial. Mr. Catton

HI 306 Twentieth-Century America Spring
A study of the political and social forces in America, concentrating on the road to World War II, the War, the Cold War, and post-war America from Truman's Fair Deal to the New Frontier and the Great Society. Mr. Jacobs

HI 312 The Renaissance and Reformation Spring
Western Europe from 1300 to 1600. Political and social changes in the north, the growth of humanism in the south, the religious revolts, and the Catholic Reformation. Mr. Tillinghast

HI 314 History of Russia to 1953 — Spring

A study of Russian history from 1725 to the death of Stalin, stressing the major internal forces of modernization, as well as the impact of the western example. Mr. Pereira

HI 316 History of Modern Europe, 1890-1950

Continues the approach of HI 315. Special attention to the rise and nature of modern totalitarianism. Miss Lamberti

HI 318 English History as a Background for English Literature — Spring

From the Elizabethan period to the first World War. Stress will be on intellectual and social history: i.e., on the development of forms of society and thought that made it useful for authors to treat literary themes at particular times in particular ways. Mr. Tillinghast

HI 401-20 Pro-Seminars — Fall and Spring

The purpose of the pro-seminar is to teach students how to put together a research paper. The first few weeks are spent in reading in the area of the course in class, and in an introduction to bibliographical problems. During the rest of the course, the students write a long paper on a subject of their own choosing. The pro-seminar is required of majors in their junior year and is open to others by permission. The department may permit a student to write an equivalent research paper in a field not covered by the pro-seminars; in this case he should register for HI 500. Staff

410 Twentieth-Century America — Spring
Mr. Jacobs

413 African History — Spring
Miss Strobel

HI 425 The Literature of History — Fall and Spring

Extensive directed reading in the field of the student's choice designed to give him a thorough grounding in the secondary literature and major interpretive problems of a particular area of history. (Required of majors in sophomore or junior years; open to others by permission.) Staff

HI 425c Russia — Spring
Mr. Pereira

HI 500 — Fall and Spring

Special research projects. (Permission) Staff

HI 700 Independent Study — Fall, Winter and Spring

Seniors will choose, with departmental advice and approval, from among the following types of Independent Study projects: 1) a two-term thesis, departmental or interdepartmental, the work to be continued and completed during either the winter or spring terms; (2) an interdepartmental essay, jointly approved and directed by an adviser in both departments; (3) a historiographical essay; (4) a bibliographical essay; (5) an oral history project; (6) a translation project; (7) a conventional historical research paper; (8) practice teaching in history, in conjunction with the Teacher Education program, in local secondary schools, with a written report to be turned in to the History Department at the end of the semester; and (9) HI 705, below. Eligibility for honors will normally be confined to students completing the two-term thesis, although outstanding performance in any of the other undertakings may result in permission to continue and complete it during a second term (winter and spring) and become eligible for honors.

HI 705 Teaching Assistantship Spring
Teaching assistance in discussion sections of certain lecture courses. Permission of the course instructor is required. Staff

HI 710 Topics in Comparative History Spring
Senior seminar. Readings and discussions in problems chosen by staff and students, encouraging a comparative study of problems common to different periods and different fields. Staff

MATHEMATICS

The Major includes work in analysis through advanced calculus, a year of modern algebra, plus work in several elective fields. Probability and statistics, topology and geometry, real and complex analysis, number theory and advanced algebra and an introduction to digital computers are available to all majors. Each major will make a careful choice of electives with the help of his adviser in order best to fulfill his particular mathematical needs.

Advanced placement is offered freshmen whose secondary training indicates they can successfully take the sophomore course.

Seniors must register for MA 704 in the Spring Term.

Required for the Major: MA 112, MA 113, MA 201, MA 202, MA 301, MA 302, MA 401, MA 402, three electives in the Department and MA 704. Physics is recommended and, under special circumstances, certain courses in other departments may serve in lieu of one or two of the required departmental electives.

MA 109 Introduction to Modern Mathematics Spring
An introduction to the content, method, and form of mathematics requiring no special background. Topics covered will be chosen by the instructor to illustrate the nature of mathematical reasoning and thought. Extensions of mathematics into new areas (e.g. plane vs. higher dimensional geometry, the theory of numbers), the role of conjecture and proof, solvability. Recent developments will be discussed where possible and topics will be approached through direct involvement in elementary research problems. (No prerequisite.) (This course will also receive credit for Teacher Education.) Mr. Peterson

MA 112 Mathematical Analysis-I Fall & Spring
Introductory analytic geometry and calculus; designed for students with four years of secondary school mathematics. The differential calculus of algebraic functions and applications; the indefinite and definite integral, area under a curve. Mr. Ballou

MA 113 Mathematical Analysis-II Fall & Spring
A continuation of MA 112; may be elected by freshmen who have had an introduction to analytic geometry and calculus in secondary school. Applications of integration to volumes of revolution, length of arc, surface of revolution, pressure, and work; the calculus of the elementary transcendental functions; hyperbolic functions; polar coordinates; determinants. (MA 112 or permission.) Staff

MA 201 Mathematical Analysis-III Fall & Spring
The calculus of functions of more than one variable. Introductory vector analysis, analytic geometry of three dimensions, partial differentiation, multiple integration and applications. (MA 113 or permission.) Mr. Carruth

MA 202 Mathematical Analysis-IV Fall & Spring
Infinite series and an introduction to ordinary differential equations. Convergence of numerical series; Maclaurin and Taylor series; first and second order differential equations, linear differential equations with constant coefficients, applications. (MA 113 or MA 201.)
Mr. Ballou

MA 302 Abstract Algebra I Spring
An introduction to the study of groups, rings, and fields. Algebraic structure; transformations and permutations, cosets and quotient groups; ideals, quotient rings; field characteristics. (MA 202 or permission.) Mr. Peterson

(MA 303 Abstract Algebra II) To be offered in 1972-73.

(MA 310 Probability) To be offered in 1972-73.

(MA 311 Statistics) To be offered in 1972-73.

MA 321 Elementary Number Theory Spring
Divisibility and primeness. Number congruences, the theorems of Lagrange, Fermat and Euler, residue theory, quadratic reciprocity. Diophantine equations. The distribution of primes, density and the Prime Number Theorem. (MA 113.) Mr. Carruth

MA 402 Advanced Calculus Spring
Further topics in the calculus and real analysis. Fundamental concepts of real function theory, divergence and curl, line integrals, Green's theorem, the Stieltjes integral, infinite series, power series, Fourier series, improper integrals. (MA 202.) A continuation of MA 401.
Mr. Bielli

MA 411 Elementary Topology Spring
An introduction to the concepts of topology. Theory of sets, topology of the real line, continuous functions and homeomorphisms, compactness, connectedness, metric and function spaces, selected topics from the topology of Euclidean space. (MA 201 or permission.) Mr. Olinick

(MA 431 Complex Analysis) To be offered in 1972-73.

MA 500 Advanced Study Fall & Spring
Individual study for qualified students in more advanced topics in algebra, number theory, real or complex analysis, topology. Particularly adapted for those who enter with advanced standing. (Permission.) Staff

MA 704 Problem Seminar Spring
Each student is required to complete problems designed to bring together the many facets of Mathematics investigated in the previous 3 1/2 years. Each student presents orally at least two problems during the term. Required of mathematics majors. Mr. Peterson

MUSIC

The offerings of the Music Department focus on three areas of the discipline: 1) The vocabulary and theory of music, 2) its historical development, 3) its creative aspects--performance and composition.

The relative emphasis on any of these three will vary for the individual music major according to his talents, interest and needs. Independent study consists of advanced work in one

or more of these areas as determined by the department in consultation with the student.

It is generally assumed that the major will take MU 101, MU 102 (Music as Idea and History), MU 206, MU 207 (Performance), MU 209, MU 210 (Theory), MU 309, MU 310 (Analysis), and three other departmental offerings.

Any of these requirements may be waived or changed if the department feels the best interests of the student are served.

MU 102 Music as Idea and History — Spring

This course focuses on a relatively short period of music history, relating developments in the arts with developments in politics, social structure, technology, philosophy, religion, and the other arts. The course seeks to discover what kind of history music history is. Illustrative, but not necessarily included in the course, would be an investigation of how the Protestant Reformation, humanistic learning, growing middle-class society, the development of music printing, religious and philosophical emphasis on the impact of "the Word", etc. had profound significance in the development of music in the 16th century. Music will be studied as a manifestation of such influences and likewise as another means for discovering the fundamental aesthetic values of the period under investigation. Mr. Kurtzman

MU 207 Performance — Spring

The focus of this study is the development of musical understanding and expression through active participation in making music. As a laboratory course, the primary work takes place in tutored private practice and ensemble rehearsal; choir, orchestra, chamber groups, and individual instruments. (Permission.) Mr. Fanning & Staff

MU 210 Theory — Spring

Continuation of MU 209. Required of majors. Mr. Fanning

MU 310 Analysis — Spring

Continuation of MU 309. Required of majors. Mr. Todd

MU 325 Music in the 20th Century — Spring

An examination of the music of the past fifty years with emphasis on recent works and trends in electronic media, "chance" music, serialism, musique concrete and mixed media. The electronic studio will be used in this course. One class meeting per week. Mr. Todd

MU 704 Senior Seminar — Spring

Research for all departmental majors.

See also INTERDEPARTMENTAL ID 300

Applied Music

The aim of the Department is to present music for its value as literature and as a record of one aspect of human achievement, not as professional training. We strongly encourage students to improve performing techniques as a necessary means of cultivating the art. The College will assist the student as far as possible in securing adequate instruction when not provided by the regular staff.

Students who wish private instruction in piano, organ, violin, viola, or classical guitar should enroll with the Department during registration.

Fees are to be paid to the Cashier's office at the beginning of each term. No rebate is allowed for lessons missed except in the case of continued illness. Applied Music instruction consists of 1 lesson weekly; fee $105 per semester. See department for information on financial aid.

Private Instruction in Piano	Mr. Kurtzman
Private Instruction in Voice	Mr. Baker
Private Instruction in Organ	Mr. Fanning
Private Instruction in Violin and Viola	Mr. Glick
Private Instruction in Classical Guitar	Mr. Rhinelander

Music Library. The Christian A. Johnson music library contains several thousand records, scores, books, and a collection of chamber music. Listening facilities in the library are available to anyone from the college community.

Practice Facilities. Practice rooms with pianos are available for individual and group rehearsal. Organs: Walcker (1969) mechanical action, 15 ranks; and Gress-Miles (1970) 48 ranks. Application should be made to the secretary of the music department.

College Orchestra. Weekly rehearsals leading to the performance of music from all periods. Performance by small ensembles is encouraged. All instrumentalists are urged to audition. Apply to secretary of music department. Exceptional players may audition for the Vermont State Symphony Orchestra. Mr. Fanning

College Choir
The College Choir sings at Chapel Services and special concerts on and off campus. In keeping with the educational intent of the choral program, repertoire for all performing groups is as historically inclusive and demanding as possible. Performance in languages other than English is stressed. Audition required, open to all students without prerequisite. Mr. Fanning

Recitals
Regularly scheduled recitals and lectures are open to the public.

PHILOSOPHY

Non-majors: Most of the Philosophy Department courses are open to students who are not majors and who have had little or no previous work in philosophy. PA 115-116 is the general introduction to the field and is open to students in all classes. Courses in the 200 range are introductions to specialized areas of philosophical study which do not require particular competences though students who have done work in education, religion, or the arts will find their studies in those areas of assistance. Except as noted, 300 level courses are generally open to students but they suppose a higher level of sophistication than the 200 level courses and are not normally open to freshmen. 400 level courses are normally open only to majors. Non-majors with a previous background in philosophy may elect a 400 course but they should consult with the instructor.

Major program: Majors will elect ten courses in the department which may include PA 115 and 116. Cognate courses particularly in the areas of political science and religion may be substituted for two courses with prior permission. Majors must elect: one course in Ethics and Social Philosophy (PA 300-320); one course in Philosophy of Science and Theory of Knowledge (PA 350-370); one course in Studies in the History of Philosophy (PA 400-420) and the Senior Seminar (2 course units) in Contemporary Philosophy.

Honors candidates will do a 500 project in the Winter Term of Senior Year and may substitute under exceptional circumstances a second term of 500's work for the second term of the Senior Seminar. Students must have a B average in all work in the department during their junior year and first term of senior year to be permitted to undertake an Honors project. 500

projects are open only to philosophy majors and they must have attained an average of B in all course work within the department.

PA 116 The Philosophical Tradition: From the Scientific Revolution Spring
Traces the impact upon theories of knowledge and metaphysics of the development in natural science. General reading in the history of philosophy will serve as background to in-depth study of such figures as: Bacon, Descartes, Locke, Berkeley, Hume or Kant. (Two lectures and one discussion.)
Staff

(PA 210 Philosophy of Education) To be offered in 1972-73.

(PA 213 Philosophy of Religion) To be offered in 1972-73.

(PA 217 Philosophy of Art) To be offered in 1972-73.

Ethics and Social Philosophy

Courses numbered in the range PA 300 - 320 fall in the general area of ethics, social philosophy and theory of value. Offerings may change from time to time and courses will be alternated as indicated.

PA 307 Ethics and Analysis Spring
The questions to be discussed are not what things in general are right or good, but: what do judgments or right and good mean; how, if at all, can they be rationally justified; are they relative to an individual or culture. The course will be a survey of major contemporary views on these questions. (At least one course in philosophy - preferably PA 305, or permission.)
Mr. Bigelow

PA 309 Philosophy of Law Spring
A study of various attempts to understand the essence of law, concentrating on the opposition between theories of natural law and of legal positivism. Special emphasis will be given to the problem of obligation to obey the law. In addition to important historical figures, contemporary legal theorists such as H. L. A. Hart and Lon Fuller will be read. Specialized topics such as the legal enforcement of morality, punishment and civil disobedience will be considered at the conclusion of the course. (Offered in alternate years.)
Mr. Bates

Philosophy of Science and Theory of Knowledge

Courses numbered in the range PA 350 - 370 fall in the general area of theory of knowledge or epistemology. Problems of knowledge, proof and perception have been particularly central to philosophical concerns in the modern period. Students considering graduate work in philosophy should elect courses in this area. Offerings may change from time to time and courses will be alternated as indicated.

PA 352 Philosophy of Mind Spring
Topics will include the mind-body problem, behaviourism and physicalism, rationality, and human action and intentions. (Previous work in philosophy recommended. Offered in alternate years.)
Mr. Temin

PA 353 Philosophy of Science Spring
Principles of scientific method and the nature of scientific explanation, the concept of a "law of Nature", causality, induction and probability.
Mr. Temin

Studies in the History of Philosophy

Courses numbered in the range PA 400 - 420 will cover major figures in philosophy or major movements, e.g., empiricism, rationalism, idealism, existentialism. These courses are recommended to students planning to pursue graduate work in philosophy and should normally be elected only by students who have had previous courses in philosophy.

PA 500 Research in Philosophy (open only to majors) — Spring and Fall
Staff

PA 704 Senior Seminar: Contemporary Philosophy — Spring and Fall
All seniors elect two terms of the senior seminar. The seminar is devoted to the study of contemporary figures or movements in philosophy. Students will be expected to prepare periodic research papers utilizing primary sources and journal literature. Staff

PHYSICAL EDUCATION AND ATHLETICS

The Physical Education Program concentrates on the so-called life-time sports so that all students leave Middlebury with exposure to sports or recreational activities in which they have developed a degree of skill and interest that will be an asset to them in later years. The program consists of five seasons in essentially life-time sports, i.e., dual, individual, dance and swimming (required for those unable to pass the pool test) and a credit maximum of three seasons for participation in intercollegiates, performing groups, or instructional team sports. There are two seasons in each of the two college terms and one season in the college winter term.

Students may complete their Physical Education Program by utilizing any of the following options and opportunities:

a. Instructional classes
b. Approved independent programs
c. Exemption program
d. Any combination of the above, including a three season credit for participation in intercollegiates, performing groups, or instructional team sports.

The Physical Education Program may be completed at any time, or by any of the above options, convenient to the student during his/her four years at Middlebury - except that three exemptions or three seasons credit should be attained by the end of the Junior year to insure completion of the program. The entire program may be completed by demonstrating proficiency at or above the intermediate level in three life-time activities offered in the exemption program, provided the "Pool Test" has been passed. The passing of one or two exemptions provides the student with one or two seasons credit toward completion of the entire program. Students may take no more than three instructional classes in the same activity nor receive more than three seasons credit for the same activity (one of which may be an exemption credit). A yearly medical examination is required of all students participating in departmental programs.

All registrations for instructional classes in physical education are held in the McCullough Gymnasium Office, and registrations are held prior to the start of each of the five seasons during the college year. There are three exemption periods during the year (early fall, middle winter, and late spring) and students sign up for test appointments at the McCullough Office prior to the announced exemption periods. Students should consult the appropriate department member concerning participation in intercollegiates and performing groups. Application forms for independent programs are available at the Offices in the Field House and McCullough and are

returnable, for consideration, to Prof. Colman's office in the Field House one week prior to the start of each physical education registration period. Students who wish to elect courses (i.e., the student does not need the course for physical education credit) should register with the department for the appropriate season and they will be scheduled for classes on a space available basis.

Physical Education Program (Winter II and Spring Seasons)
Specific seasonal course offerings are available at the time of registration prior to the start of each season. Staff

Physical Education Registration Periods: (9:00-12:00 and 1:00-4:00 at McCullough Office)
For Winter II Season - February 14, 15 and 16.
For Spring Season - March 20, 21 and 22.

Approved Independent Programs: Applications are available at the offices in McCullough and the Field House and are returnable, for consideration, to Prof. Colman's office in the Field House one week prior to the start of each physical education registration period.

Exemption Periods: (Students must sign up for test appointments at the McCullough Office prior to the start of the exemption periods.)
February 14, 15 and 16: Skiing, figure skating, dance, badminton, gymnastics, swimming, and pool tests.
May 15, 16 and 17: Tennis, archery, golf, canoeing, riding, dance, gymnastics, badminton, and pool tests.

PE 271 Dance: A Performing Art Spring
A course involving the performing aspects of Modern Dance. It is designed to develop an appreciation for the Dance as a creative and disciplined art form and to train the students as dancers capable of effective and artistic communication. Included are Technique and Composition Classes, Repertory, Seminar, and Production. Three classes a week plus three technique classes. (Previous dance experience or permission.) Miss Gulick

PHYSICS

The course offerings in the Department of Physics are designed to fill the needs of a liberal arts curriculum. The offerings are suitable for three categories of students: (1) Those who do not intend to specialize in science, but have an interest in science; (2) Those who desire a basic introduction to physics as an adjunct to a major in another science; and (3) Those who major in physics. Students normally major in physics as preparation for graduate study in the sciences or engineering, as preparation for a professional school, or as preparation for teaching. Students planning to major in physics should start with PH 109-110, no later than their sophomore year and preferably in their freshman year. Students with excellent secondary school training may be permitted to begin their study of physics with PH 201, PH 202 Modern Physics.

For students not specializing in science the department offers three one-term courses, PH 101 The Physical World - Energy and Stability, PH 102 The Physical World - Geometry and Motion, and PH 251 Introduction to Astronomy. These courses have no prerequisites and are not sequential.

Students intending to major in physics (category (3) above) will find that the department offers a full complement of both theoretical and experimental courses. The minimum requirements for a major in physics are the four term sequence of Mathematical Analysis, the four term sequence of General Physics and Modern Physics, four electives in physics, and either

two terms of Independent Study followed by general examination (two credits total), or two terms of Advanced Laboratory followed by general examination (two credits total). Specific courses to be taken by a major are determined by him in consultation with his department adviser. The department offers a program for majors of Environmental Studies with Emphasis in Physics. (See Environmental Studies.)

PH 102 The Physical World - Geometry and Motion — Spring

The course examines the fundamental laws which are used to describe the movements and interactions of particles and waves. The approach taken is largely an historical one which documents the changing views which man has held of the physical structure of the universe, the geometry of space and time, the nature of light, and the fundamental constituents of matter. Because knowledge of the physical world is ultimately gained through our senses, attention will also be given to the physical basis of perception, and the extent to which natural senses are extended or replaced by instrumentation. The basic concepts of particle and wave motion will be illustrated by laboratory examples drawn from various fields. Three hours of lecture, three hours of laboratory. (The courses PH 101 and PH 102 are not designed for science majors. They may be taken in either order.)

Mr. Wright

PH 110 General Physics II — Spring

An introductory course to electricity, magnetism, and optics. A knowledge of calculus of the level of MA 112 is assumed. The computer is used in analyzing experimental results and solving theoretical problems. Three hours lecture, three hours laboratory. (PH 109)

Mr. Gould

PH 202 Modern Physics II — Spring

An introduction to quantum physics including wave machanics, the uncertainty principle and wave-particle duality. Application of quantum mechanics is made to simple atomic and molecular systems. Nuclear physics and the theory of solids are also introduced. Three hours lecture, one laboratory/problem session. (PH 201)

Mr. Winkler

PH 251 Introduction to Astronomy — Spring

The course introduces the ideas and purposes of astronomical investigation. Some historical perspective on this most ancient of sciences serves as a background for a discussion of current theories about the solar system, stellar evolution, the galaxy, and beyond. The college observatory is used for observational work. Three hours lecture and laboratory as arranged.

Mr. Winkler

PH 302 Electromagnetic Waves — Spring

The radiation, propagation, and characteristic properties of electromagnetic waves are shown to follow from Maxwell's equations. The electromagnetic nature of light is investigated, and principles of physical optics are studied including interference, diffraction, reflection, refraction, polarization, etc. Lab experiments with microwaves and lasers are used to supplement and illustrate the lectures and problems. (PH 301 or permission.) Three hours of lecture and one laboratory/problem session.

Mr. Terwilliger

PH 312 Methods of Theoretical Physics — Spring

The course concentrates on the methods of applied mathematics and the special functions which are commonly used in theoretical work. Topics include matrices, eigen values, complete sets of functions, complex variables, the Fourier transform, the use of Green's functions, and the calculus of variations. Problems will be drawn from several branches of physical science. Three hours of lecture. (PH 110 and MA 201)

Mr. Wright

PH 332 Heat and Thermodynamics — Spring

The fundamental laws of thermodynamics are presented from a macroscopic (phenomenalogical) approach. Applications are made to gaseous, liquid and solid systems. The role that thermodynamics plays in the consumption of energy sources is investigated. Heat transfer by conduction, convection, and radiation is presented with applications. The striking similarity between the basic equation of heat flow and those of other diffusion processes is called upon to expand the students' range of application of the equations. (PH 109) — Mr. Gould

(PH 402 Advanced Quantum Mechanics) Not offered in 1971-72.

(PH 442 Advanced Laboratory) To be offered in 1972-73.

PH 500 Research and Special Topics (Permission) — Fall and Spring, Staff

PH 705 Independent Study — Spring

Independent Study followed by general examination. — Staff

POLITICAL SCIENCE

The major in Political Science examines the theory and practice of politics. The major program begins with a term study of politics in general, followed by a term of American or comparative politics. Intermediate level courses are offered in the major fields of the discipline. The senior program is directed toward intensive study in research seminars. Offering a selected core curriculum with a broad range of approaches to the study of politics, including philosophic, traditional, and scientific analysis, the curriculum is designed to meet the demands of modern citizenship as well as the basic preparation for graduate work or law school. Normally only courses at the 100 level are open to Freshmen.

Required for the major in Political Science: A total of ten Political Science courses, including: (1) PS 101 and 102 or 104, (2) completion of the Senior Program, and (3) two courses in each of three of the following fields: American Political Institutions, International Politics and Foreign Policy, Comparative Politics, and Political Philosophy and Behavior. Majors also should consult with their advisers regarding appropriate cognate courses.

Senior Program: The Senior Program normally consists of two Research Seminars, each of which includes an advanced research project. The Research Seminars are listed as the 400 level courses below. They may be taken at any time beginning with the Spring Term of the Junior year, but they must be taken during separate terms. Two course credits are granted for the Senior Program. Students admitted to the Honors Program may substitute one term of Honors work for one of the Research Seminars. Department approval also may be granted to Seniors with exceptional records who wish to substitute an Independent Project (PS 500) for one of the Research Seminars. Proposals should be submitted to the Department for approval at least one month prior to the registration period for the Senior term in which the project would be undertaken.

Honors Program: Students may become candidates for Honors in Political Science at any time after the beginning of the Spring term of the Junior year and prior to the Spring term of the Senior year. Honors projects normally will be begun in the Senior Research Seminars or 500 projects. Prior to the beginning of the Winter term of the Senior year, the Department will determine whether Senior Seminar or 500 projects are progressing satisfactorily enough to be continued as Honors projects. One course credit (PS 500) is granted for Honors work.

PS 102 The American Political Regime Spring
An examination of the principles and structure of the American political regime, followed by a study of basic problems of American politics. Readings include Madison's Notes from the constitutional Convention, Jefferson, the Federalist, Tocqueville, Calhoun, Lincoln, Frederick Douglass, Malcolm X, Supreme Court cases, and interpretive essays. Mr. Dry and Staff

PS 104 Political Systems of Europe Spring
A comparative analysis of selected political systems in Europe. Emphasis will be on variations in political structures and functions between democratic Great Britain and totalitarian Soviet Union. Mr. Fontaine

American Political Institutions

PS 204 American Politics and Legislation Spring
The formal and informal aspects of legislative organization and procedure; a study of political power as it is found in the legislative process and in the activities of the power groups found in American society. Closely related to current legislative proceedings. Mr. Thurber

PS 301 State and Local Government Spring
Institution structure and political process at the state and local level. Contemporary issues and problems facing state and local givernment in the American political system. Mr. Thurber

PS 303 Public Administration Spring
A study of some fundamental aspects of administrative phenomena, including the common elements and the differentia of public and private administration; the necessity or dispensability of administrative frameworks, in particular the bureaucratic type; the relations between law, politics, and administration; arguments for administrative responsibility and accountability, as well as for autonomy and discretion; the meaning of administrative justice. Some attention will also be given to arguments about the possibility of a science of administration. Mr. Nelson

PS 306 American Constitutional Law: Individual Rights Spring
Study of the Supreme Court's treatment of apportionment and rights of suffrage; the freedom of speech, press, assembly, and religion; and the administration of justice. Focus on the adjudication of conflicting rights within the context of representative government. Materials include cases and interpretive essays. (Junior standing and PS 305 or permission.) Mr. Dry

International Relations and Foreign Policy

PS 202 Contemporary International Politics Spring
Major areas of conflict and cooperation in the contemporary international system. Includes an exercise in diplomatic gaming. (PS 201 or permission.) Mr. Leng

PS 302 International Conflict Resolution Spring
An investigation of contemporary approaches to the resolution of international conflict focusing on major contemporary international conflicts. The theoretical rationale and utility of diplomacy, international law, international organization, and regional integration as approaches to the resolution of conflict will be considered in light of the conflicts investigated. Mr. Leng

(PS 304 Theories of International Politics) To be offered in 1972-73.

PS 402 American Foreign Policy: Summit Diplomacy Spring
Seminar study of American Summit Conferences of World War II from the Atlantic Conference

through Potsdam. Review and analysis of major issues, developments and leadership through the study of basic documents, memoirs, biographies and special studies. Emphasis on individual reports and critiques throughout. Mr. Hoag

Comparative Politics

PS 322 Government and Politics of Southeast Asia Spring
Examination of the effects of Nationalism, Communism and Modernization upon the area with special attention directed to the countries of Burma, Thailand, Vietnam, Malaysia and Indonesia. Historical background reading supplemented by comparative and particular country studies through oral and written reports. Exploration of current problems confronting the area and the individual states. Mr. Hoag

PS 407 The Politics of Modernization Spring
A comparative study of social change in Latin America. Topics will include the role of traditional elites, the middle class, the military, political parties and ideology. (Seniors and 314 or permission.) Mr. Fontaine

Political Philosophy and Behavior

PS 318 Political Philosophy Spring
Close study of some classics of modern political philosophy, including works by Machiavelli, Hobbes, Locke or Spinoza, Rousseau, Hegel, Marx, and Nietzsche. Themes include the transition from natural right to natural rights, the humanist revolt against classical political philosophy, the rejection of the contemplative ideal and its replacement with various activist images of human being, self-inflicted balkanization of political philosophy and the emergence of independent and allegedly superior human studies.

(PS 401 Seminar on Representative Government) To be offered in 1972-73.

Independent Projects

PS 500 Advanced Projects in Research
A program of independent research designed to meet the individual needs of advanced students majoring in Political Science. (Permission) Staff

PSYCHOLOGY

For the student who majors in psychology engagement with experimental data lays the basis for an empirically-founded and objective formulation of principles of human behavior. He may encounter the data in published research reports, in his regular laboratory work, and in connection with his own research along lines that he finds important. The relevant observations may involve human subjects or sometimes infra-human subjects for the better experimental control that they may permit. Whatever the sources of his observations, the student comes to see them as products of the experiments that generated them, and thus he evaluates their importance for hypothesis or generalization.

As a psychology major the student takes a program of elective and required courses in psychology and related disciplines. By the end of his sophomore year, through work in Psychology, and in cognate fields, he has acquired familiarity with many of the data, concepts, and research procedures essential to an understanding of human behavior. During his last two years he makes use of his accumulated knowledge and skills in his deep involvement with several areas of central importance to psychology.

Students generally choose to complete as much as possible of their formal course work toward the major by the end of the junior year so that their work in psychology as seniors can be devoted to independent reading and study and possibly to individual research leading to Departmental Honors.

Required for a Major in Psychology: PY 105, (or PY 102), PY 201, PY 205, PY 301, PY 305 and at least three additional fall or spring term courses in psychology; participation during one winter term in a scheduled winter program in psychology; Qualification in Psychology; Senior Seminar (PY 704) and the General Examination in Psychology (PY 705); and completion of cognate requirements: two one term courses, chosen in light of the student's interest and with the consent of the Psychology Department, from among the courses offered in Biology, Chemistry, Mathematics, and/or Physics.

Qualification in Psychology must ordinarily be accomplished by the end of the student's sophomore year and is achieved by completion of Psychology PY 105 (or PY 102) with a grade of at least 70, by completion of Psychology PY 201 with a grade of at least 70, and by completion of the extra-departmental cognate requirements stated above. A student who has not met Qualification by the end of his sophomore year may be granted exception to the requirements on action of the Department in response to his written request.

Senior Program: Senior Seminar (PY 704) involves conferences with staff and preparation of several papers and presentation of these papers to a seminar during the fall and spring terms of the student's senior year. Preparation for the General Examination (PY 705), given yearly in May, will involve independent reading by the student. This preparation may be done as the equivalent of one course during the fall or winter or spring term of the student's senior year at his choice.

If the student seeks to be graduated with Departmental Honors in Psychology he must apply to the Department before February 1 of his junior year. He will then register for Advanced Research (PY 500) during the spring term of his junior year to delimit his problem and conduct any necessary pilot or feasibility studies for his research. Upon successful conclusion of such studies he will, if he chooses, be admitted to Honors candidacy, and continue his research during his senior year as part of his work in PY 704. He may also, if he chooses, devote the Winter Term of his senior year to research. Upon successful completion of his project an Honors Examining Board will be convened to consider and make recommendation about the order of Departmental Honors to be awarded upon his graduation. These orders include Honors, High Honors, and Highest Honors in Psychology.

PY 105 Psychology: A Viewpoint — Fall and Spring

Several important issues selected from the problems of perception, motivation, and mental illness are considered from the point of view that, for a psychologist, a satisfactory understanding of the phenomena he studies will necessarily depend on his seeing them in terms of his subject's (1) physical capabilities and limitations, (2) experiential environment, and (3) interactions with that environment. 3 hrs. lecture, 2 hrs. practicum. — Staff

PY 201 Principles of Research in Behavioral Science — Spring

This course introduces the student to behavioral experimentation through a consideration of the problems relating to the design and analysis of experiments. It deals, further, with the accepted procedures for describing and reporting the outcomes of such research. (PY 102 or 105, or permission.) — Mr. Ewell

PY 225 Developmental Psychology — Spring

The purpose of this course is to examine human development in terms of the principles and

methods of psychology. The course will consider in turn such topics as: the nature of the developmental process, the methodology of child study, perceptual-motor development, the development of language and intellectual skills, and the development of gender role. (PY 102.) (This course will also receive credit for Teacher Education.) Mr. Prouty

(PY 305 Experimental Psychology: Psychophysics and Scaling) To be offered in 1972-73.

PY 316 Research in Physiological Psychology Spring
In this course the students explore intensively the various experimental procedures used in psycho-physiological research. In laboratory they carry out a number of these procedures, observe their effects on behavior, and histologically verify their central nervous system loci. (PY 301 and permission.) 2 hrs. lecture, 3 hrs. lab. Mr. Pellegrino

PY 322 Psychology in Clinical and Educational Contexts Spring
This course is devoted to the procedures of recognizing, through tests and otherwise, the problems of mental retardation, brain injury, emotional disturbance, and of the "bright" or "dull" child. Some consideration is given to the treatment of these problems. Students with particular interest in one type of problem will have the opportunity to explore that problem in depth. (PY 101 or 102 or 105.) (This course will also receive credit for Teacher Education.)
Mr. Ewell

(PY 326 Personality) To be offered in 1972-73.

PY 500 Advanced Research Fall and Spring
A program of research arranged to meet the needs of advanced students majoring in psychology. (Permission.) Staff

PY 704 Senior Seminar Fall and Spring
In this program, required of senior psychology majors during Fall and Spring terms, the student with faculty guidance chooses one or a small number of topics in the literature of psychology to pursue deeply on his own. He reports to his fellow students several times on this work. Participation in this program carries one course equivalent in each of the two terms.
Staff

PY 705 General Examination in Psychology
Senior psychology majors are expected to work independently throughout the year in preparation for the General Examination given in May. This examination covers the field of psychology rather than specific course material. Each student is granted one course equivalent for preparation for this examination. He may take that equivalent, at his own choice, during the fall, winter, or spring term of his senior year. Staff

RELIGION

The program of the Department of Religion is designed to introduce the student to various aspects of the religious experience of mankind. The courses numbered RE 200 are open to all students, including Freshmen.

A major in religion shall fulfill the following requirements: three courses numbered in the 200's, four courses numbered 300, a thesis written during the fall and winter terms of the senior year which may count for two or three course units, and two to four cognate courses approved by the department.

RE 101 Seminars in Religion — Fall and Spring

A course organized around six week seminars which deal in depth with a particular issue or topic. The student will select two seminars at the beginning of the semester from a list prepared by the department. (This course is open only to freshmen.) Staff

RE 201 The Biblical Heritage — Fall and Spring

An introduction to biblical history and literature. This course will be offered each semester. Mr. Scott

RE 203 Classical Issues in Religious Thought — Fall and Spring

Classical religious and philosophical perspectives on such topics as the idea of God, the problem of evil, human freedom and destiny. This course will be offered each semester. Mr. Rockefeller

(RE 206 The Religious Traditions of India) To be offered in 1972-73.

RE 208 History of Buddhism — Spring

The formation of Indian Buddhist traditions and their classical reformation in countries outside India (Ceylon, Southeast Asia, China, and Japan). The interaction of Buddhism with indigenous traditions. (Offered in alternate years.) Mr. Nuovo

Studies in Religion

The following courses, limited in enrollment, may change in number and topic from year to year. They may be elected, with the permission of the instructor, by students who have not had previous courses in religion.

RE 302 The Religious Thought of the Twentieth Century — Spring

Studies in the theology and philosophy of religion of such authors as Bergson, Teilhard de Chardin, Dewey, Buber, Tillich, Wieman, Niebuhr, and Stace. Mr. Rockefeller

RE 304 The Idea of God in the History of Religions — Spring

The origin of the idea of God in human consciousness and its meaning in various cultures. This course will juxtapose selected accounts of the idea of God, e.g., in primitive society, Classical Greece, the Biblical and Hindu traditions and modern interpretations. Mr. Nuovo

RE 308 Seminar in American Religious History — Spring

A study of selected themes or periods in American religious history. For 1971-72; the period to be considered is 1880-1930. Mr. Ferm

RE 310 Biblical Seminar — Spring

The Literature of Exile and Persecution: an examination of the effect of exile, dispersion, and persecution on the development of Jewish and early Christian thought and practice. Readings in Ezekiel, Deutero-Isaiah, Lamentations, Daniel, I Peter, Hebrews, and the Apocalypse (Revelation). Mr. Scott

RE 500 Independent Study

RE 700 Senior Research

RUSSIAN

The following courses taught in English by the Department of Russian are open, with the permission of the chairman of the department, to students who are majors in other departments: RU 251 and RU 252, Russian Literature and Culture; RU 351, Dostoevsky; RU 352, Tolstoy; RU 353, The Russian Short Story; and RU 354, Soviet Russian Literature.

Admission to the major program is attained through satisfactory grades in RU 202 and RU 252 or through satisfactory scores on a qualifying examination. The qualifying examination will cover all language skills and a general knowledge of Russian literature and culture from its beginnings to the present day.

Normally a major program will consist of the following courses: RU 301, RU 302 and three courses chosen from the following: RU 311, RU 312, RU 401, RU 402, RU 411, RU 412. Although all students will be expected to take work in the areas of language, literature, and civilization and culture, the program of an individual student may place greater emphasis on any of these three areas and each student's program will be planned individually in consultation with the chairman.

The senior program will consist of a Senior Seminar (the equivalent of one course), for which students will normally register in the spring semester. Students with particularly strong records for the first three years of study will be encouraged to prepare an Honors project under the supervision of a faculty member. Upon the approval of the chairman Honors work may be substituted for the Senior Seminar.

RU 102 Beginner's Russian — Spring
Oral inductive approach to provide a firm control of the sound system and the structure of the language. Although the emphasis is on the spoken colloquial language, reading, writing, and the fundamentals of grammar are gradually introduced in order to provide a solid foundation for work in advanced courses or for reading in specialized fields. (RU 101 or permission.) 2 hrs. lect., 3 hrs. drill sections, plus intensive use of the language laboratory. Mr. Baker & Staff

RU 202 Intermediate Russian — Spring
Continuation of the oral approach used in RU 101, 102, and 201, but with increasing emphasis on reading and writing. (RU 201 or permission.) 1 hr. lect., 3 hrs. drill sections, plus intensive use of the language laboratory. Mr. Baker & Staff

RU 252 Russian Literature and Culture — Spring
Continuation of survey of Russian cultural history and literature. The main emphasis will be on the literature and the culture of Soviet Russia. No knowledge of Russian is required. (Permission.) Mr. Orth

RU 302 Russian Conversation and Composition — Spring
Continuation of development of oral fluency, together with review of grammar and study of some of the more intricate elements of Russian grammar. (RU 301 or permission.) Mr. Baker

RU 312 Russian Prose and Drama of the 19th Century — Spring
Reading in the original of works of some of the major 19th century writers. Classroom discussions and written assignments in Russian. (RU 311 or permission.) Mrs. Baker

(RU 351 Dostoevsky (in English)) To be offered in 1972-73.

(RU 352 Tolstoy (in English)) To be offered in 1972-73.

RU 353 The Russian Short Story — Spring
A formal study of the Russian "isms" (Romanticism, Realism, Symbolism, Constructivism, Futurism, Formalism, Socialist Realism) based on a reading of some of the major Russian writers of short stories. No knowledge of Russian is required. (Permission.) Mr. Motolanez

RU 402 Advanced Language Study — Spring
Continued development of the spoken and written skills, including stylistic analysis of various types of material. (RU 401 or permission.) Mrs. Baker

RU 412 Russian Poetry — Spring
Study in the original of Russian poetry from the 18th century to the present day. Classroom discussions and written assignments in Russian. (RU 302 or permission.) Mr. Motolanez

RU 500 Advanced Studies in Language and Literature — Fall & Spring
Supervised individual study for highly qualified students; including Honors Thesis.

RU 704 Senior Seminar — Spring
A consideration of selected works from Russian literature and intellectual history. Written reports and individual oral presentations in Russian. (Senior majors.) Staff

SOCIOLOGY-ANTHROPOLOGY

The major in Sociology-Anthropology will provide the student with a significant perspective for the systematic analysis and understanding of human behavior resulting from cultural and societal forces. Based on the empirical findings of the closely related disciplines of Sociology and Anthropology, this perspective is inherently comparative, such that the department is concerned with the inter-relations between culture and society in various settings. Although both of these disciplines share common concern about human behavior, each in addition has its own history, concepts, and theoretical commitments. Anthropology essentially focuses on the role of culture in human experience and Sociology is concerned primarily with the role of social interaction and the social structure in human experience.

To achieve the requisite understanding of human behavior in the sociocultural context, the major in Sociology-Anthropology is exposed to the theoretical and empirical literature through a coordinated series of 6 required and 4 to 8 elective courses. During the beginning course (SA 101 and SA 102), the student is introduced to the basic concepts, theories, and findings of both Sociology and Anthropology. At this point, each major must declare a "specialization" in either Anthropology or Sociology. (This does not preclude the election of courses in both fields.) Depending on the specialization chosen, one must fulfill the following requirement: if specializing in Anthropology, one "culture area" course from among those which will be offered (SA 321, SA 326, SA 332); if specializing in Sociology, SA 205, Sociological Theory.

All majors, regardless of specialization, must take SA 301, Research Methods. It is strongly suggested that students take this course in the junior year in order to prepare the topic and background for their Senior (or Honors) Thesis. Sophomores may register for the course if they wish.

During the final year, the student will participate in the Senior Program, including a Senior Thesis (or Honors Thesis), and the Senior Symposium. Normally the Senior Program will carry two Fall and Spring term course credits.

Thus, a total of 6 courses will be required, leaving a minimum of 4 and a maximum of 8 fall and spring electives. For his elective courses, a student is free to pursue the study of those problem areas or special interests which best suit his future career plans. The courses in the department are so arranged that a student might choose from a number of possible alter-

natives. (See the printed chart available from the department.) A student might choose to take most of his electives within either a sociological or anthropological framework. However, he might also choose, for example, to focus his attention on "social process and social problems" thus cutting across and combining courses taught by both anthropologists and sociologists under that general heading. Other such combinations are also possible.

Required for the major in Sociology-Anthropology: SA 101, SA 102, SA 301, either SA 205 or one "area course," the Senior Program (the senior thesis and the senior symposium) plus a minimum of four but not more than 8 fall and spring courses in the Department and a minimum of one but not more than two winter courses in the Department (one of which may be part of the Senior Program). The selection of cognate courses will be planned with the major's adviser, taking into consideration the student's aims and purposes in the department.

The Senior Program will consist of the Senior Thesis and the Sociology-Anthropology Symposium. The program will carry three course equivalents, two of which will be allocated to the Senior Thesis and the remaining one to the Symposium. For every student, the Spring term will be devoted to preparation for the symposium. The two course equivalents designated as the Senior Thesis will normally be taken, one each, in the Fall and Winter terms.

Departmental Honors will be granted to those who do superior work on the senior thesis, symposium, and course work in the department.

Consult the Department bulletin for further details on the Senior Program.

Introductory Courses

SA 102 Introduction to Sociology Spring
A systematic study of society and social organization. Major theoretical concepts of sociological analysis presented and applied to the basic institutions of man and areas of specialized interest. Emphasis on American society. (Not open to juniors and seniors.)
Mr. Fengler, Mr. Mick, Mr. Nye

Theory and Method

SA 301 Research Methods Spring
The relationship of concepts, hypotheses, and theories to general principles of research. The systematic procedures of design and measurement used by sociologists and anthropologists to obtain and analyze data about culture, human groups and institutions. Selected methods including interviewing, observation, and questionnaires. Introduction to the logic of statistical inquiry and proof with practical applications stressed. Preliminary bibliographic search and research design as background for the senior thesis. Strongly recommended for juniors. (SA 101, SA 102).
Mr. Mick

Social Organization and Comparative Institutions

SA 337 Political Sociology Spring
A consideration of the nature of power and theories of the distribution of power at both national and community levels. An examination of the social and social psychological factors influencing such aspects as voting behavior, political involvement and party identification. The conditions conducive to the development and sustenance of democratic principles and governments in a variety of nations. (SA 101, SA 102, or permission.)
Mr. Fengler

Area Studies

SA 326 Latin American Culture and Society — Spring
An examination of the features that characterize the Latin American cultural area as seen from the anthropological perspective. Although historical data will be considered, the main emphasis is on contemporary Latin America. Particular attention will be paid to urbanization, sub-cultures, social stratification and value orientations. (SA 101, SA 102 or permission.) (Offered in alternate years.) Mr. Andrews

SA 332 African Cultures and Societies — Spring
Description and analysis of African cultures and societies, South of the Sahara. Historical and contemporary perspective of structure and change, particularly the modernization process. (Offered in alternate years.) Mr. Grindal

Social Process and Social Problems

(SA 343 Urban Sociology) Not offered 1971-72.

SA 351 Personality and Culture — Spring
The relationship of socio-cultural and psychological variables in understanding human behavior with emphasis upon cross-cultural data dealing with non-Western peoples.
Topics to be considered will include: (1) Human evolution and human nature; (2) Culture, cognition, and the perception of reality; (3) Education and personality development; (4) Colonialism and the psychodynamics of change in developing societies and (5) Mental illness and the question of social pathology. Mr. Grindal

(SA 356 Socio-Cultural Change) To be offered in 1973-74.

SA 359 Peasant Society and Culture — Spring
Comparative analysis of contemporary peasant societies and cultures. Examination of the social position of the peasants in the wider society of which they form a part. Study of the distinctive folk traditions and customs of peasant societies. Analysis of the impact of twentieth century political and economic changes on the cultural values and social systems of differing types of peasant societies. (SA 101, SA 102, or permission.) (Offered in alternate years.) Mr. Andrews

SA 366 Majority-Minority Relations — Spring
Focus on the causes, purposes, and consequences of prejudice, discrimination, and segregation, especially as they are manifested in various institutional contexts. Problems of self-conception, adjustment patterns, social movements and black power, community organization, and styles of life. Special emphasis on the Negro American. (SA 101, SA 102, or permission.) Mr. Nye

SA 500 Advanced Individual Study — Fall and Spring
Open to qualified students, by permission. Staff

The Senior Program

SA 704 Sociology-Anthropology Symposium — Spring
Each senior, in a series of essays, will deal with some major questions and issues in Sociology and Anthropology, in order to attain an integrated overview of his experience in the Department. Periodic symposia will be convened for discussion and debate of these issues. Staff

SPANISH AND ITALIAN

Spanish

The program of study in Spanish represents a carefully coordinated sequence of instruction in language and literature. The early courses concentrate on developing fundamental language skills, after which students are introduced to the special demands of literary analysis and interpretation. In the more advanced courses, major writers and literary genres are presented in an order of gradually increasing linguistic difficulty.

Required for the major: SI 301, SI 302, plus six higher courses. Also it is recommended that at least two additional courses be selected, in consultation with this department, from related areas such as English, American, and European literatures, Art, and History. Study in a Spanish speaking country is highly encouraged for majors in good standing. Middlebury College offers a special Junior level program of Spanish studies in Madrid. For information on this and other Junior Level or summer study programs abroad, see Junior Year Abroad Program. Majors must enroll in the Seminar given in the Spring Term of their senior year. Qualified students may undertake approved independent study in their junior and senior years. Any student may select to live for one year in the Spanish corridor.

SI 102 Beginning Spanish — Spring
For students who have successfully completed SI 101, the course emphasizes the control of basic language skills which are then used in reading and discussing selected short works by modern Spanish and Spanish American authors. Mr. Peel and Staff

SI 202 Continuing Spanish — Spring
Modern literary and cultural texts from many parts of the Hispanic world serve as the basis for conversation in Spanish on a variety of topics. Follows SI 201. Mr. Peel, Mrs. Centeno

SI 245 Writing in Spanish — Spring
An advanced course in composition for students seeking to perfect their command of written Spanish. A sound knowledge of grammar is essential for the wide variety of written exercises assigned weekly. Strongly recommended for Spanish majors as necessary preparation for the critical essays required in literature courses.

SI 302 Literary Analysis and Interpretation in Spanish — Spring
A continuation of SI 301, this course is an introduction to the techniques of critical analysis of Hispanic literature. With SI 301, it completes the prerequisite for all courses at the 300 level or higher. Selected works of modern Spanish and Spanish American authors are studied in depth in order to develop further the student's ability to read and interpret perceptively various literary forms: poetry, novel, theater, and short story. Authors read will be Bécquer, Darío, Unamuno, Machado, Baroja, García Lorca, Azuela, and Fuentes. Frequent short essays provide practice in concise interpretive writing. Mr. Kelsey

(SI 315 Spanish Poetry of the Twentieth Century) To be offered in 1972-73.

(SI 320 The Modern Spanish American Novel and Short Story) To be offered in 1972-73.

SI 325 The Contemporary Spanish American Novel — Spring
An analysis of the Spanish American novel of the last two decades. The many themes and innovations of writers such as Onetti, Carpentier, Rulfo, Fuentes, Cortázar, García Márquez, Vargas Llosa, and Donoso are explored in detail. Mr. Peel

(SI 415 Lpope de Vega y la comedia española del siglo XVII) To be offered in 1972-73.

SI 420 - SI 440 Seminars: Seminars are offered each spring in a wide range of topics, varying from year to year. They include the following: La literatura de la España medieval; Hispanoamérica: época colonial; La poesía lírica del Siglo de Oro; La tradicíon picaresca en la literatura española; Romanticismo, realismo y naturalismo en España; El teatro moderno en Espana; La poesía hispanoamericana del siglo XX. The department encourages suggestions from students for other topics, and will attempt to arrange seminars for which there is sufficient interest. Plans must be made no later than the beginning of the preceding Fall or Spring Term.

SI 420 Seminar (1971-72): Readings in the History of the Spanish Language Spring
A course of basic readings in the development of the language that will combine a view of the larger historical background of Spanish from its origins to the present with the practical study of a number of selected texts from various ages. Juniors, seniors or permission. Mr. Ilgen

SI 500 Independent Study
The department will consider requests by qualified juniors and seniors to engage in independent work.

Italian

SI 152 Beginners' Italian Spring
This course is devoted to a review and application of the basic principles presented during the first semester. Readings; compositions; reports; laboratory assignments. Five class meetings per week (two in lecture sections, three in drill sections). Mr. Castiglione, Mrs. Castiglione

SI 252 Advanced Italian Spring
Reading of works by modern and contemporary Italian authors. Discussions; compositions; laboratory assignments. Mr. Castiglione

SI 352 Introduction to Literature Spring
The aim of this course is to acquaint the student, through classroom discussions and oral reports, with the principal currents and authors of Italian literature from the 16th century to the present. Mr. Castiglione

SI 354 Contemporary Italian Prose Spring
A study of the younger generation of Italian prose writers, with emphasis on the relevance of the particular setting of their works. Authors studied will include Calvino, Sciascia, Bassani, Cassola and Mastronardi. Mrs. Castiglione

SI 550 Advanced Studies in Language and Literature Fall and Spring
Mr. Castiglione

TEACHER EDUCATION PROGRAM

The Teacher Education Program offers students opportunities to study educational issues and to prepare themselves as elementary or secondary school teachers. Teacher Education is not a major. The Teacher Education Program also offers students advice on graduate and summer programs in Education.

Upon graduation, students whom the Teacher Education Committee, composed of students and members of the Faculty, judges capable of fulfilling a public school teacher's responsibili-

ties without further external support or stimulus can be automatically certified in the following states:

Alaska	Maine	Ohio
California	Maryland	Pennsylvania
Connecticut	Massachusetts	Rhode Island
Delaware	New Hampshire	South Dakota
Florida	New Jersey (elem. only)	Vermont
Hawaii	New York	Washington
Kentucky	North Carolina	

Students can also earn certification in states not listed here, and they should consult the Director of Teacher Education for advice.

In judging students for certification, the Teacher Education Committee tries to assess each candidate on his strengths and to accommodate the differences in experience and interest which distinguish students from one another. The Committee expects students normally to have undertaken the following studies:

For elementary certification (K-6):

1) One term of college mathematics, advanced placement in mathematics, a course on the teaching of arithmetic in elementary schools, or a demonstrated lack of need for such study.
2) One term of college science, advanced placement in science, or a demonstrated lack of need for such study.
3) One term course in the foundations of education (see courses below marked with asterisks).
4) Problems and Methods of Education -- Elementary (TE 304) or its equivalent.
5) Student Teaching (TE 404-405).

For secondary certification (7-12):

1) A major or its equivalent in a discipline which coincides with a subject widely taught in public secondary schools. The following majors do not coincide with subjects taught widely in public secondary schools; students wishing to major in these areas and seeking secondary certification should reconsider their choice of major and/or speak to the Director of Teacher Education as early in their college careers as possible.

American Literature	Art History	Economics	Philosophy	Religion
Anthropology	Geography	Greek	Psychology	Sociology

2) One term course in the foundations of education (see courses below marked with asterisks).
3) Problems and Methods of Education -- Secondary (TE 314) or its equivalent.
4) Student Teaching (TE 414-415).

MA 109 Introduction to Modern Mathematics — Spring
Appropriate for elementary school teachers. — Mathematics Staff

*(PA 210 Philosophy of Education) To be offered in 1972-73.

*PY 225 Developmental Psychology — Spring
(See description under Psychology.) (PY 105 or PY 101-102 recommended.) — Mr. Prouty

*PY 322 Psychology in Clinical and Educational Contexts — Spring
(See description under Psychology.) (PY 101, 102, or 105.) — Mr. Ewell

TE 314 Problems and Methods of Education -- Secondary (7-12) — Spring
An introductory study, through readings and discussions, of issues in contemporary secondary schooling. Particular attention will be given to the aims of secondary education, the design of a curriculum, organization of schools and classrooms, the nature of teaching, and the importance

of teaching methods. Each student will observe classes at the secondary level, write analytical papers, and design a teaching unit in his subjects. Preferably taken in Junior year. (Permission)
Mr. Freidin

TE 404-405 Practice Teaching -- Elementary (Nursery-6) Fall and Spring
A double course in which each student teaches daily at a single grade level in a local school and, for a period of three full days, assumes responsibility for the activities of his classroom. Master teachers and college Supervisors of Student Teaching meet regularly with each student teacher to plan and evaluate his teaching. All students meet with the Supervisor of Student Teaching in a weekly seminar to study issues in elementary school teaching in light of their observations and experiences teaching in the local schools. (TE 304 and permission.) Admission to TE 404-405 does not guarantee a student placement as a practice teacher, because the number of places available is determined by factors beyond the control of the College: the number of local teachers willing and competent to serve as master teachers and the number of students each term who wish to practice teach.) Mrs. Gleason and staff

TE 414-415 Practice Teaching -- Secondary (7-12) Fall and Spring
A double course in which, after observing classes, each student daily teaches two or three courses in his subject at local secondary schools and toward the end of the term assumes most of the duties of his master teacher for two or three days. Each student also participates in some of the co-curricular activities of his school and writes plans and evaluations of his teaching. Student teachers work under the close supervision of their master teachers and the Supervisors of Student Teaching. The principal purposes of this course are to help each student teacher develop criteria for evaluating his performance, to test his theories of teaching and learning and his ideas about the curriculum, and under the guidance of experienced teachers to develop his own effectiveness as a teacher. (TE 314 and permission. Admission to TE 414-415 does not guarantee a student placement as a practice teacher, because the number of places available is determined by factors beyond the control of the College: the number of local teachers willing and competent to serve as master teachers and the number of students each term who wish to teach each subject.) Mrs. Thurber and Staff

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PROGRAM OF MILITARY SCIENCE

The objective of a Senior Division Army Reserve Officers' Training Corps (ROTC) unit, organized under the provisions of the National Defense Act of 1916 and amendments thereto, is to provide a program which will attract, motivate, and prepare selected students with potential to serve as commissioned officers in the Army Reserve or Regular Army. The ROTC curriculum at Middlebury College provides a flexible program of instruction designed to complement the student's civilian goal of acquiring a baccalaureate degree in a course of study of his choosing by enabling him to develop those attitudes and qualities that will facilitate transition to military service. The curriculum, unified by leadership and management subjects, includes institutional enrichment courses and courses in Military Science. The program includes a two-year basic course offered during the freshman and sophomore years, and a two-year advanced course offered during the junior and senior years. Credit for previous active duty military service and ROTC training will be granted in accordance with current Department of the Army regulations. Draft deferments will be provided all members of the program.

The Basic Course

A two-year basic course is available to all male students who voluntarily enroll in the freshman year. During the freshman year the course meets one period each week during the fall and spring semesters. During the sophomore year the course meets two periods each week during the fall and spring semesters. Six hours of leadership laboratory (drill) are also required each semester during both the freshman and sophomore years. Uniforms, books, arms and equipment are furnished by Department of the Army at no cost to the student.

MS 11 (Fall) and MS 12 (Spring) Freshman Basic (Military Science I)
Fall and spring semester. Fundamentals of Military Leadership and Management (one hour each week) and Leadership Laboratory (six hours each semester).

MS 21 (Fall) and MS 22 (Spring) Sophomore Basic (Military Science II)
Fall and spring semester. Applied Military Leadership and Management (two hours each week) and Leadership Laboratory (six hours each semester).

The Advanced Course

A two-year advanced course is offered to juniors who either successfully complete the basic course, served on active duty in the Armed Forces for one year, or successfully complete a six-week basic summer camp prior to their junior year of college. Members of the advanced course are selected by the President of the College and the DMS from students in the sophomore class who volunteer and are in one of these categories.

During the junior and senior year the course meets two periods each week during the fall and spring semester. Six hours of Leadership Laboratory are also required each semester during both the junior and senior years.

Students enrolled in the advanced course will receive a retainer allowance of $50.00 per month. Department of the Army also purchases for each advanced course student a regulation Army Officer uniform. This is worn during leadership laboratory and is retained by the student upon his graduation.

Attendance at one advanced summer camp of six weeks duration is mandatory. During attendance the student is paid $225.30 per month. Mileage rate is paid from home of record in Continental United States to camp and return. Students will attend camp between their junior and senior years, but deferment to the next summer may be made, for a cogent reason, when approved by the DMS.

The ROTC student is given a general military science course which does not emphasize any one branch or service. Prior to commissioning, assignment to a branch will be made based on existing Army quotas and the individual's desires and capabilities. Training is oriented primarily toward a commission in one of the combat arms--Infantry, Air Defense, Artillery, Armor, Signal Corps, or Engineer Corps. Students whose academic program has particularly qualified them may request a commission in one of the technical service branches--Chemical Corps, Ordnance, Finance, and others.

Students who enroll in the Advanced Course must agree to complete ROTC training, unless circumstances beyond their control make it impossible to do so. Students must agree to accept a commission, if it is offered, and to serve on active duty in the Army for a period of two years.

Commissioning Requirements. Once a student is enrolled in the Advanced Course, he must satisfactorily complete the following to be eligible for a commission as a Second Lieutenant:
a. Education: Receive a baccalaureate degree.
b. Military Training:

(1) Complete all military courses for the Senior Division ROTC.
(2) Complete ROTC Advanced Summer Camp.
(3) Be recommended for appointment by the President of the College and the Director of Military Science.

Upon successful completion of the above requirements, the student is commissioned as a Second Lieutenant, U.S. Army Reserve. Outstanding military students are eligible for a direct commission in the Regular Army upon graduation. Graduates then report to active duty within the first twelve months following their commissioning. Those who desire to attend graduate school may be deferred from active duty for the duration of their graduate study, but not to exceed 24 months. Exceptions to this policy will be granted to students pursuing advanced study in the healing arts, ministry and the legal profession.

MS 31 (Fall) and MS 32 (Spring) First Year Advanced Course (Military Science III) Fall and Spring semester. Advanced Leadership and Management (two hours each week) and Leadership Laboratory (six hours each semester).

MS 41 (Fall) and MS 42 (Spring) Second Year Advanced Course (Military Science IV) Fall and Spring semester. Theory and Dynamics of the Military Team and Military Leadership and Management (two hours each week) and Leadership Laboratory (six hours each semester).

ROTC Flight Program. This program is available to selected cadets in their senior year at no cost to the cadet. The student is given thirty-five hours of ground school and thirty-six hours of flight instruction. Successful completion of this program qualifies the individual for a Federal Aviation Agency Private Pilot's License.

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